Client Survey Project

SUMMARY

Report highlighting data obtained from:

- High school students
- First year post-secondary students
- Apprentices
- Employers

Ministry of Advanced Education, Training and Technology

June 1992

93-00141/

HIGHLIGHTS

Over 5000 people surveyed

The Client Survey Project (CSP), initiated in the Spring of 1991, was designed to provide key information about the aspirations and expectations of a range of clients about B.C.'s post-secondary education (PSE) system. The Ministry obtained more than 5000 survey responses from grade 12 high school completers, first year post-secondary students, apprentices and employers. This was supplemented with information from focus group discussions with students, a survey of employers, public opinion polls, and an extensive search of similar studies in other jurisdictions.

Students have high aspirations

The CSP yielded valuable insights on the aspirations of grade 12 and first-year post-secondary students. Survey results suggest that three-quarters of all high school completers expect to enter a post-secondary education institution within six months of graduation. In addition, students have high expectations with respect to the credential they expect to achieve — more than 40% of high school completers indicated that they hoped to obtain a professional and/or graduate degree.

Students have high expectations

To address the key issue of what students expect to achieve from attending PSE, respondents were asked to rate the overall importance of several expectations they held relating to career/financial, personal, educational and social goals. Survey results suggest that students attach considerable importance to almost all expectations, although those relating to career and personal goals were generally rated higher than those associated with educational and social development.

What is the appropriate "mix"

What is most striking, however, is the balance that exists across the various types of expectations — students appear to want both fulfilling, well-paid careers and a general, well-rounded education. For example, students enrolled in programs that are perceived to be more "career-focused" (technical, vocational programs) also place high emphasis on the value of education for itself; similarly, students in programs that are viewed as less career/job oriented (fine arts, general studies) have high expectations with respect to career-related goals or issues. It should also be noted that the relative importance assigned to various expectations was not significantly different on the basis of the students' socio-economic background (parents' occupation and highest level of education).

Confidence in decisions

The survey also yielded some unexpected results. For example:

- While a low proportion of students indicated satisfaction with the information that they received with respect to post-secondary institutions (12.6%) and programs (19.1%), more than three-quarters of all students surveyed indicted that they were very or reasonably confident in their choice of institution and/or program.

- First-year students already enrolled in an institution were less satisfied with their knowledge about institutions/programs than were high school completers who were about to enter a post-secondary program.

Emphasis on life-long learning

- Approximately three-quarters of all students — high school completers, first-year post-secondary students and apprentices — view their current program as a step towards further education. Two-thirds of all first year students expect to enroll in at least one credit program even after the completion of their current program.

Employers value general skills

Given that B.C. businesses have a significant interest in the post-secondary education system, more than 800 employers were contacted to discuss their expectations about the system. While employers are more supportive of applied rather than broad academic programs, employers value students who have a broad range of skills — with written and oral communication, problem-solving skills and computer skills being cited as important or very important attributes. In general, most B.C. employers are satisfied with the quality of university and college graduates hired.

Challenges for the system

It should be noted that the results of the Client Survey Project pose a number of questions for policy-makers and planners in the post-secondary education system. These include: the overall capacity of the system to respond to the high aspirations and expectations of students; the appropriate "balance" between meeting career/financial and personal/intellectual development needs; student information needs regarding program selection, institutions, and student financial assistance; and concerns regarding student aid programs.

A framework for decision-making

It is the intention of this report to identify client expectations on a system-wide basis to enable planners to have a common information base as a framework for developing post-secondary education decisions.

Client Survey of British Columbia's Post-Secondary Education and Training System

The Client Survey Project (CSP), commissioned by the Ministry of Advanced Education, Training and Technology in the spring of 1991, measures client expectations of British Columbia's post-secondary education and training system. Students represent the direct client group of the post-secondary education system, while employers are one of the key indirect client groups.

Purpose

The purpose of the CSP is to gather and provide pertinent information to assist in planning broad future directions for British Columbia's post-secondary education and training programs. The central question of this project is whether students pursue post-secondary education primarily to attain fulfilling, well-paid careers, or whether their main interest is to obtain a general, well-rounded education.

Specifically, the CSP is designed to answer such questions as:

- What do students entering post-secondary programs expect to gain from this experience?
- What is the relative importance of expectations relating to jobs, careers and financial gain vis-a-vis educational/intellectual goals? How important are social and personal goals?
- How do these expectations vary across types of institutions, programs, and socio-economic groups?
- What do employers expect when they hire a post-secondary graduate?
- How do students view certain related issues and challenges currently facing the post-secondary education and training system (lifelong learning, financing education, information needs of students, etc.)?

Tasks

In order to answer these questions, the following tasks were completed:

- The 1991 High School Completers Survey examines the educational aspirations and expectations of those students who have just completed grade 12.
- The 1991 Post-Secondary Student Survey examines expectations of first-year college and university students regarding the provincial post-secondary education system.
- The 1991 Apprentice Survey examines apprentices' expectations of the provincial apprenticeship system.
- The 1991 Employer Survey examines employer opinions of British Columbia's secondary and post-secondary education systems with respect to their effectiveness in preparing students for the workforce.

- Focus Group Sessions were conducted with first-year post-secondary students to complement information collected in the Post-Secondary Student Survey.

- A review of literature was conducted, including a review of opinion research from the Fall 1991 Decima Report.

A survey of Adult Basic Education and English as a Second Language students was also commissioned. The survey data were unavailable when the CSP results were being compiled, thus are not included in the present analysis. They will, however, be released at a later date.

Research for the CSP was undertaken between August 1991 and December 1991. A total of 5,132 usable surveys were obtained from a distribution of nearly 11,700. While the surveys consisted primarily of close-ended questions, respondents were presented with the opportunity to include additional comments and to raise other issues related to the post-secondary education (PSE) system. Response rates ranged from 57.5% among first-year PSE students to 30.6% among high school completers.

BCHRD

As a collection, this comprehensive body of information represents part of the Ministry's contribution to the British Columbia Human Resource Development (BCHRD) Project. The BCHRD Project is a major undertaking of the Province of British Columbia involving partnership of the ministry and post-secondary education institutions, with participation from business, labour, community and equity groups. The BCHRD Project was launched in early 1991 to address two separate, yet related, challenges:

- The first important challenge emerges from the complexity of contemporary personal, ethical and citizenship issues. Changes in social attitudes and demographics have placed increased pressure on individuals as they relate to others in society. New technologies have created the potential for a polarized income distribution. Nations and people have become more interdependent. Environmental issues are worldwide in scope. As a result, exercising the rights and responsibilities of citizenship in democracies has become more daunting as the issues become more complicated. Citizens need to be better informed to act. Here, improved education is required for personal, social, and cultural effectiveness.

- The other challenge is economic. B.C. must be able to sustain its ability to create wealth in the next century. The world has experienced dramatic economic change. As such, B.C. businesses have found that they must compete globally to thrive in a world economy that gradually dismantles trade barriers and moves closer together through modern communications and transportation technology. Experience indicates that firms who use, keep up with, and innovate with modern technology will do well. Here again lies the importance of education and training — developing skills needed for the marketplace.

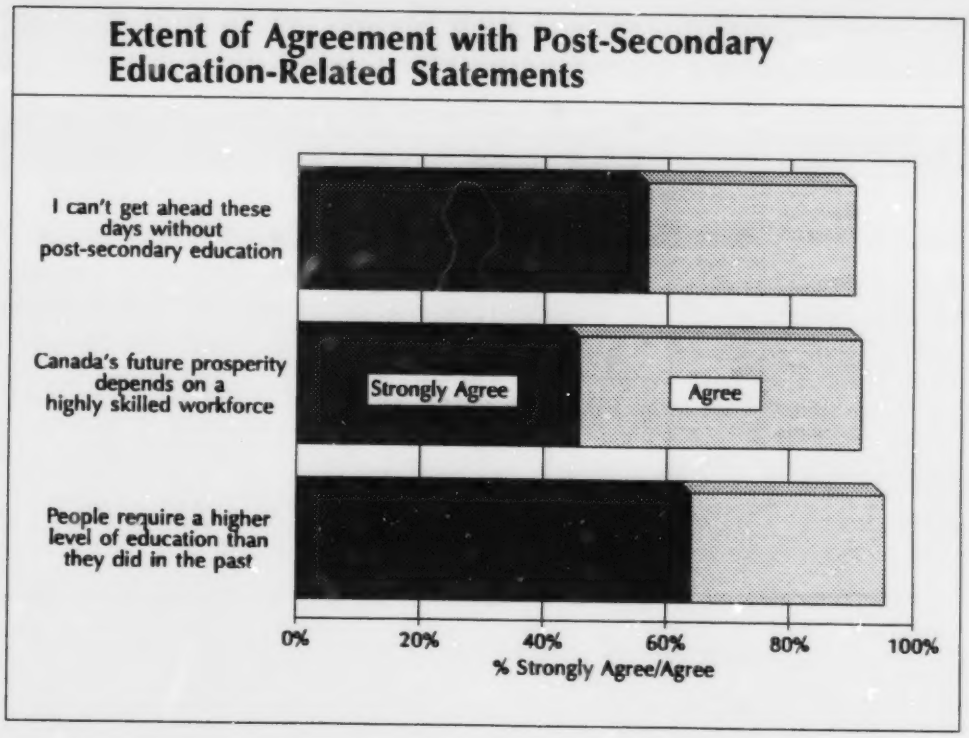
The Importance of Education and Training

The rising demand for higher education coincides with the radical transformation of Canada from an industrial society to a society characterized by economic globalization, a labour force shifting from the goods-producing sector to the service sector, and the rapid diffusion of technology into the workplace. The Economic Council of Canada, in its report Good Jobs Bad Jobs (1990), summarized the impact of these factors on today's labour force:

> *The growth of services, along with the information explosion and the internationalization of business activity, is fueling the demand for an increasingly well-educated and skilled workforce. Canada's future economic welfare will be dictated in no small measure by its capacity to develop human resources. The 'education and training' imperative will also be compelling for individuals, since employment experiences will be less and less favourable for those who have skill deficiencies. In fact, our analysis suggests that the segmentation of the labour market into 'good-job' and 'bad-job' sectors is likely to raise considerable challenges for policymakers (p.18).*

Students Recognize the Importance of PSE and Training

Survey results indicate that students and apprentices in B.C.'s universities, colleges and institutes recognize the value of post-secondary education and training. For example, as highlighted in the accompanying chart, the great majority of PSE students agree that they need PSE to get ahead in life; that people generally require higher levels of education than in the past; and that economic prosperity depends on a highly skilled workforce.



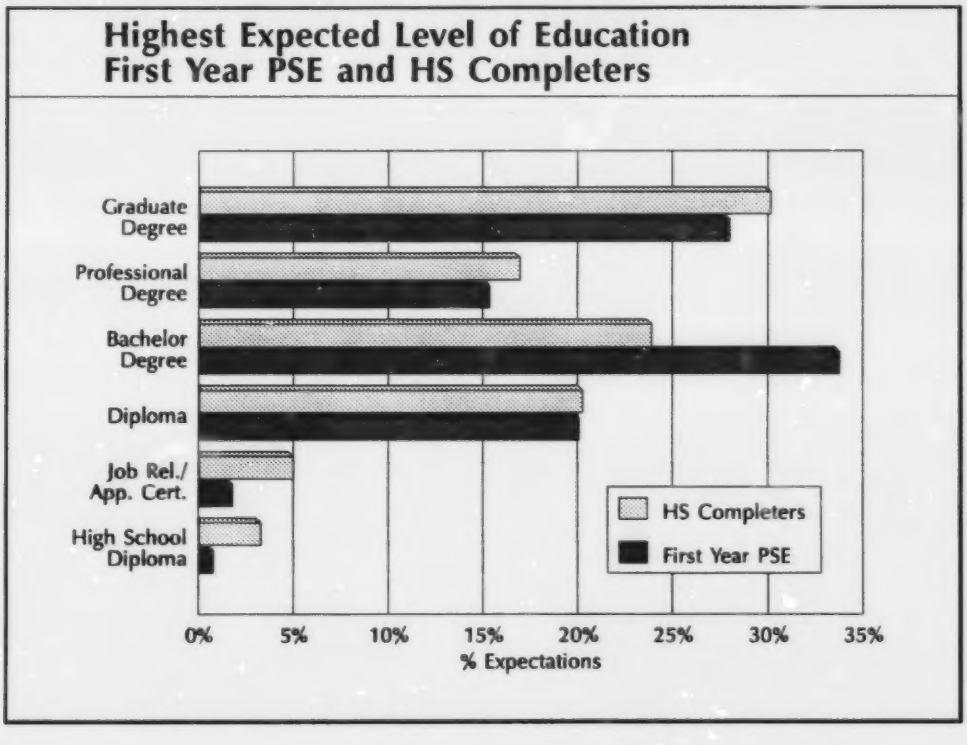
While students believe that PSE should help prepare them for a particular job or career, results indicate that it is difficult to separate the need to acquire marketable job skills from the desire for broad knowledge through a liberal education. These results corroborate one of the conclusions reached in the Report of the Commission of Inquiry on Canadian University Education:

> *The Commission concludes that there is, and always will be, a healthy tension between what might be termed the utilitarian and the cultural roles of the university but that this tension is diminishing as the economy demands students prepared for a lifetime of change and adaptation.*

Key Findings

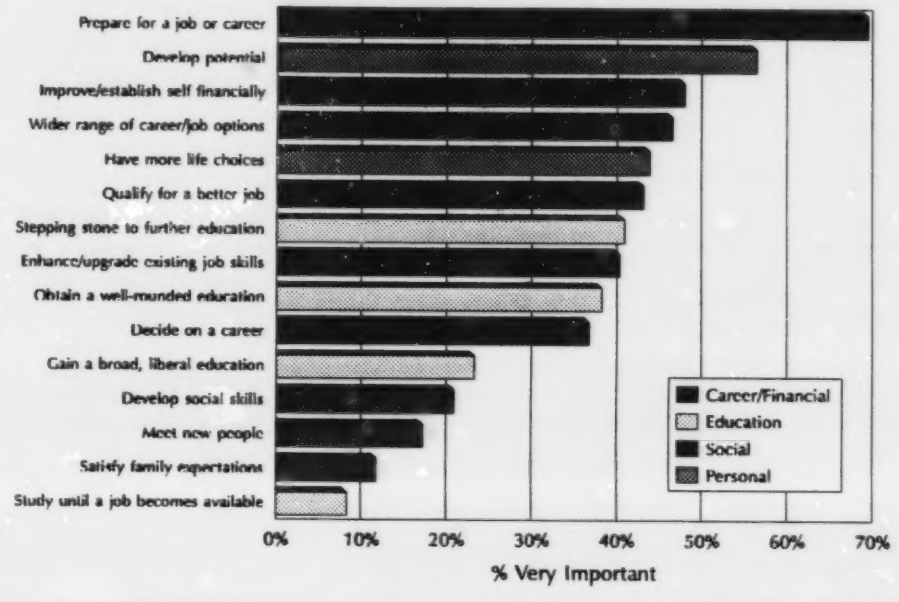
Students Have High Aspirations

Students have high aspirations with respect to post-secondary education. Nearly all (97%) high school students who responded to the survey and who were enrolled in grade 12 in May, 1991, indicated that they would likely enroll in a post-secondary education program sometime after graduation. Three-quarters indicated that they intend to go directly from high school to a post-secondary institution in the 1991/92 academic year. Two-thirds of high school completers expect to obtain a bachelor's or post-graduate degree. Among those students already enrolled in a first-year program at a B.C. post-secondary institution, 77.2% expect to obtain one or more degrees.



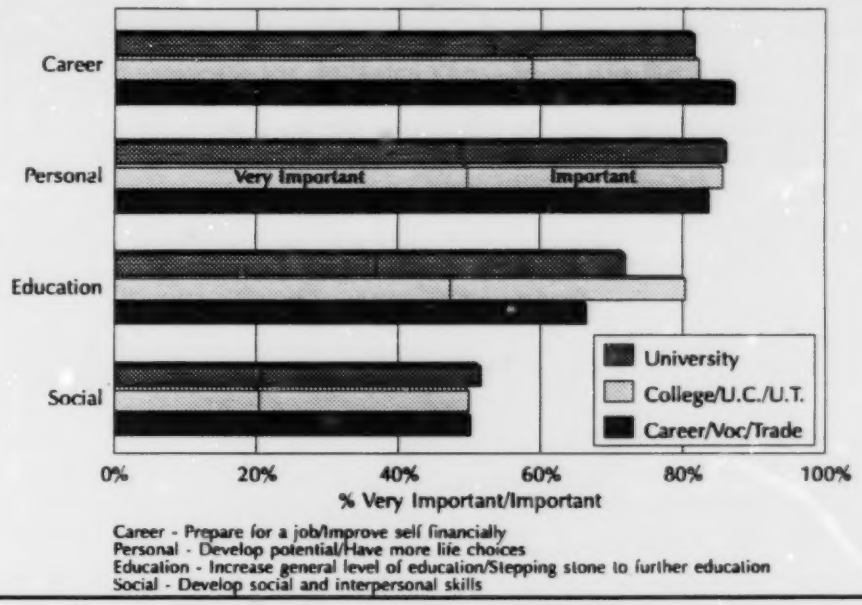
The information obtained from the three student surveys and focus group research suggests that students place high value on a number of personal, career and educational expectations. In particular, students place the highest relative importance on *preparing for a job or career*, with 70% rating it very important, and *developing their potential*, with 57% rating it very important. Students are also in agreement as to what expectations are of lesser relative importance. Fewer than 12% of respondents cited *study until a job becomes available* or *satisfy family expectations* as very important expectations of the post-secondary system.

Importance of Accomplishing Expectations of Post-Secondary Education Programs



Students enrolled in college career/vocational programs place higher emphasis on career expectations than do students enrolled in college/university-college academic programs, or students enrolled in degree programs at a B.C. university. However, college career/vocational respondents share similar aspirations with students in the various academic programs with respect to personal and social expectations.

Importance of Expectations/Goals by Institution/Program Focus



Career - Prepare for a job/Improve self financially
Personal - Develop potential/Have more life choices
Education - Increase general level of education/Stepping stone to further education
Social - Develop social and interpersonal skills

Survey results suggest that socio-economic status (SES) of students' parents is not an important factor in determining expectations among students enrolled in a PSE institution. All students, irrespective of their fathers' SES (on a quartile basis), rate *preparing for a job or career* and *developing their potential* as their top two priorities. Similarly, all students irrespective of SES attach lesser importance to such expectations as *study until a job becomes available* or *satisfy family expectations*.

PSE Student Expectations by Socio-Economic Background

	Fathers Socio-Economic Status (SES)			
PSE Goal* (in descending order of rank)	Lowest	Lower Middle	Upper Middle	Highest
Preparing for a Job or Career	1	1	1	1
Develop Potential	2	2	2	2
Improve/Establish Self Financially	3	3	3	5
Have More Life Choices	4	4	4	3
Stepping Stone to Further Education	6	5	6	4
Obtain a Well-Rounded Education	5	6	5	6
Develop Social/Interpersonal Skills	7	7	7	7

* Indicated as Very Important to accomplish

Expectations cannot be Compartmentalized

It is clear that students' expectations cannot be compartmentalized in terms of their program and/or institution. For example, while students in career/vocational programs attach very high importance to career-related expectations, they also have high aspirations regarding educational, personal and social goals. Similarly, students enrolled in arts and humanities programs cite the importance of their education in preparing them for a job or career. Among students enrolled in a four-year arts/humanities discipline, 77.6% state that career expectations are *important* or *very important*, only slightly lower than the 82.2% of engineering or applied science students who are of the same opinion.

Importance[1] of Selected Expectations By Discipline
Students Enrolled in 4-Year Degree/University Transfer Program

Discipline	Personal	Career	Education	Social
All Disciplines (Avg.)	**85.8%**	**82.0%**	**71.9%**	**52.2%**
Arts/Humanities	88.5%	77.6%	81.9%	53.9%
Business/Commerce	84.1%	88.8%	65.9%	54.1%
Eng./Applied Sciences	86.9%	82.2%	64.3%	47.6%
Health/Natural Sciences	85.0%	82.5%	71.3%	60.0%
Social Sciences	83.8%	76.3%	72.6%	47.1%
Education	84.8%	90.9%	80.8%	51.9%
Math/Physical Sciences	86.1%	83.6%	71.8%	49.7%
General/Other	85.0%	82.9%	81.8%	47.1%
Avg. Absolute % Deviation	**1.3%**	**3.6%**	**5.5%**	**3.6%**

[1] Includes those responses citing expectations as important/very important.

Life Long Learning

Students do not view their current education as a one-time activity. Three-quarters of all students (high school completers, first-year post-secondary students and apprentices) view their current education as a "stepping stone to further education". Given the high aspirations of students planning to obtain a first or second degree, students enrolled in a career/vocational program are most positive about continuing their education upon completion of their current program. Almost three-quarters (72%) of students enrolled in a career/vocational program indicate that they would likely enroll in at least one credit course upon completion of their current program.

Importance[1] Attached to Selected Career, Educational Expectations
High School Completers, First-year PSE, Apprentices

Expectation	First-year PSE	High School Completers	Apprentices
Wider Range of Career/Job Options	81.5%	81.0%	62.4%
Step Towards Further Educ./Training	72.7%	76.2%	75.1%
Obtain a Well-Rounded Education[2]	72.1%	85.4%	61.1%
Enhance/Upgrade Job Skills	67.3%	74.1%	92.6%

[1] Citing important/very important; Apprentices — very/extremely important
[2] HS Completers — Increase my general level of education

Key Issues in Education and Training

The results of the CSP provide valuable information on several key issues, including "balance" in education, lifelong learning, financing and information issues associated with post-secondary education. In particular, student financial assistance appears to be a major issue among first-year post-secondary students. For example, almost half of first-year students indicate that they do not have adequate knowledge about student financial assistance. Dissatisfaction with the student financial assistance program itself is also a recurrent theme among the five focus group meetings held throughout the province.

A Need for Better Communication?

A Substantial Proportion of High School Completers Indicated Dissatisfaction with Their Knowledge of the PSE System

- 47% Student Financial Assistance
- 27% Institutions and Program Offerings
- 30% Transferability (Apprentices)

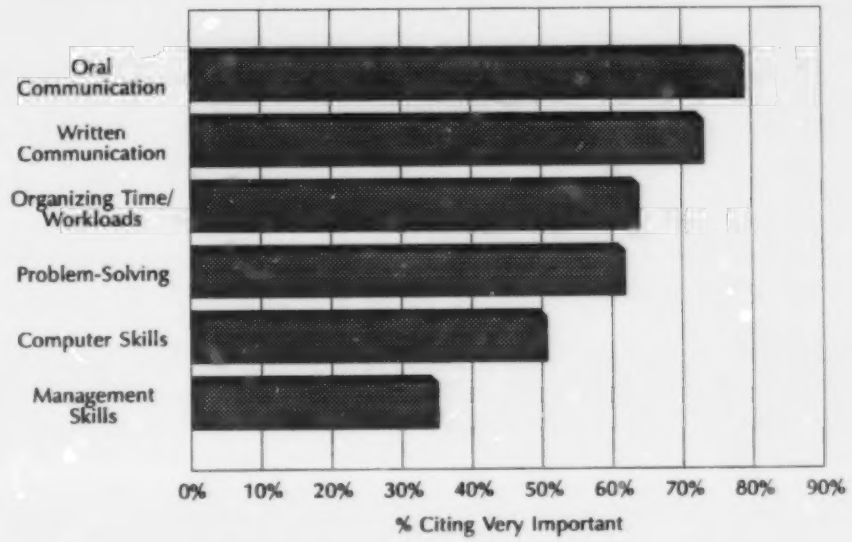
In general, students enrolled in B.C. post-secondary institutions are confident in their decisions. More than 80% of first-year students state that they are *very* or *reasonably confident* in their program and/or institutional choice. Students enrolled in career/vocational programs tend to be more confident of their decisions than students enrolled in a university degree program or a college/university-college academic program.

It appears that providing better information to students would enhance their confidence in their program/institution decision. Students who indicate that they have sufficient knowledge about post-secondary programs and/or institutions tend to be *very confident* in their program/institution decision. For example, among those students who claim that their knowledge of post-secondary education programs is *very good*, more than half (53%) state that they are *very confident* in their program decision. In contrast, among those students who indicate that they have only *limited knowledge* of post-secondary education programs, less than one-third (31%) are *very confident* in their program choice.

Employers are Satisfied with Students Hired

Among B.C. employers surveyed, most are quite satisfied with the quality of students/ graduates hired. While employers are more supportive of applied, rather than academic programs, they value students who have a broad range of skills. For example, nearly 97% of employers contacted indicate that it is *important* or *very important* that students have good communication skills. In comparison, a smaller proportion of employers attach similar importance to computer training (81%) or management skills (68%).

Employer Skill Requirements From PSE Graduates



Public Attitudes About Education

Finally, looking at the general public's perspectives on the goals of our education and training system, nearly two-thirds believe students should be exposed to the widest range of opportunities, while the remainder believe students' strengths should be identified and channeled. At the same time, most of the general population think greater emphasis should be placed on technical and vocational education. In spite of these seemingly contradictory opinions, the public is virtually unanimous in its belief that a good education is a key to success.

Public Expectations of PSE and Training

- 97% believe a good education is a key to success
- 63% believe education should expose students to the widest range of choices possible
- 78% believe a greater emphasis should be placed on technical and vocational training
- 91% support greater use of co-operative education

Source: Decima Survey, Fall 1991

Discussion Items

The results of the CSP suggest a number of issues for further discussion. While the purpose of the research was to provide additional information about what clients expect of the post-secondary system, it is essential that decision-makers evaluate the extent to which B.C. universities, colleges and institutes are meeting these expectations. Highlighted below are some policy issues arising from the information obtained through the various client surveys.

Need for "Balance" in PSE and Training

It is clear that students enter the post-secondary system expecting to achieve a range of career, personal, educational and social objectives. The diversity of expectations of students entering the post-secondary system poses several questions for policy-makers. For example:

- What is the appropriate "mix" of career and academic instruction that is required, given the breadth of expectations students hold?
- How should the system prepare students for the workforce, as well as provide them with the necessary education to enable them to continue their knowledge/education at a later date?

Student Aspirations and Expectations

Given that almost three-quarters of high school completers expect to directly enter a post-secondary institute, but only 40% actually enter, what factors account for the significant reduction in the number of students that actually enroll in a post-secondary institution? Is this a shortcoming in the system (perhaps the system has not adequately communicated the requirements associated with post-secondary education), or is it a reflection of changes in students' circumstances or aspirations?

Students have high aspirations prior to enrolling in a post-secondary institution. However, student aspirations decline somewhat upon entry into the PSE system. What factors account for this decline in aspirations? Should this be a concern to the system?

Addressing Student Goals

Students place considerable importance on preparing for a job or career. However, it cannot be inferred that students require their curriculum or program mix to be highly vocational or career-oriented. In some instances, students may feel that they can best achieve their career/job goals through academic programs rather than through applied or vocational programs. For example, the proportion of students enrolled in arts and humanities programs who indicated career expectations were *important* or *very important* (77.6%) was not significantly lower than the proportion of business/commerce students (88.8%).

Making Apprenticeship More Attractive

The fact that apprentices wait an average of eight years before entering programs suggests that apprenticeships are either too unattractive or too unavailable to high school students. Equally important, a recent Economic Council of Canada report suggests that the apprenticeship system is primarily training students in occupational areas of low relative employment (e.g., manufacturing, construction) and providing virtually no training in areas of high and growing employment demand (e.g., service sector).

Equity Issues

With the exception of academic achievement, the profile of students being accepted at B.C. post-secondary institutions (See Appendix A) is generally representative of the profile of students applying to such institutions. However, analyses of the data suggest that students from families with higher levels of education and higher status occupations are disproportionately represented among post-secondary applicants, with much lower representation of applicants from families with lower socio-economic status. Further analysis is needed to establish the extent to which these differences reflect either variations in attitudes and aspirations developed prior to an individual facing the decision to attend post-secondary education, or "barriers" (financial and non-financial) which exclude various groups from participation in the post-secondary system.

Addressing Information Needs

A significant proportion of students, both about to enter and currently enrolled in the system, indicate that they are dissatisfied with the information they received pertaining to post-secondary programs, institutions and student financial assistance. Is this deficiency a result of insufficient information or is it the result of not providing the information in a timely and focused manner?

Addressing Employer Concerns

Employers place considerable emphasis on "general" skills such as written and oral communication, organizing time and workloads, and general problem-solving skills. However, given that employers are most supportive of applied rather than academic programs, can post-secondary institutions adequately address the business community's demand for both general skills and applied programs? Also, while the majority of employers indicate that entry-level skill-requirements have increased significantly in the last five to ten years, only a small proportion (20%) currently provide formal training courses for first-year employees. Should employers be encouraged to take a more active approach in employee training, either through cooperative education programs or other intra/extramural training programs?

Characteristics of High School Completers Planning for PSE Next Year; Characteristics of First-year PSE Students Less Than 19 Years of Age

Characteristic/Group	Population	High School Completers (N=1,325)	First-year PSE (N=544)
Grade Point Average:			
A		15.1%	33.9%
B		46.3%	42.2%
C		32.5%	19.3%
D		6.1%	0.4%
Unable to Answer		-	4.2%
Actual Inst.[1] / Preferred Inst.[2]:			
B.C. University	38.7%	47.3%	
B.C. University-College	15.2%	13.8%	
B.C. College	46.1%	38.2%	
Highest Expected PSE Level [3]:			
Less Than Grade 12	30.9%	N/A	N/A
Apprentice/High School Diploma	23.4%	4.2%	2.0%
College Diploma	31.1%	15.2%	11.6%
Bachelor Degree	10.0%	23.6%	32.3%
Professional/Post Graduate Degree	4.8%	53.8%	54.1%
Unsure	N/A	3.2%	N/A
Average Socio-Economic Score (SES):			
Father		53.1	54.1
Mother		47.2	46.3
Combined		45.2	50.2
SES Quartiles: Student's Parents			
Lowest	25.0%	10.2%	10.7%
Lower Middle	25.0%	18.6%	16.2%
Upper Middle	25.0%	27.5%	27.6%
Highest	25.0%	43.7%	45.5%
Education of Father [4]:			
Less Than Grade 12	47.4%	21.2%	19.3%
High School Diploma	11.6%	14.2%	14.7%
Apprentice/Vocational/Trade	19.6%	16.4%	14.2%
Community College Diploma	7.7%	6.5%	8.8%
Some University	2.1%	7.3%	10.7%
University Degree(s)	11.6%	29.5%	28.8%
Not Known	-	5.0%	3.5%
Main Source of Financing PSE:			
Parents		49.1%	47.3%
Student Loans		12.9%	10.3%
Scholarships/Bursaries		9.9%	13.8%
Savings		13.0%	15.4%
Part-Time Work		9.2%	8.7%
Full-Time Work		1.4%	0.4%
Other		4.4%	4.1%

[1] Actual distribution as of Fall 1990 (first time, first-year students)
[2] Among those students who selected a B.C. institution
[3] Total population aged 25-44 (1986 Census)
[4] Male population aged 45 to 64 years (1986 Census)

Client Survey Project

SURVEY REPORT

Report highlighting data obtained from:

- High school students
- First year post-secondary students
- Apprentices
- Employers

Ministry of Advanced Education, Training and Technology

June 1992

ACKNOWLEDGEMENTS

The *Client Survey Project*, commissioned by the Ministry of Advanced Education, Training and Technology, was undertaken to provide the ministry, and the post-secondary education and training system, with additional information about the aspirations and expectations of several key groups (high school completers, first-year post-secondary students, apprentices and employers) with respect to the post-secondary system in British Columbia.

The *Client Survey Project* was initiated by the Deputy Minister, Ministry of Advanced Education, Training and Technology, under the supervision of the Policy, Planning and Program Evaluation Division. The subsequent development, administration and analysis of the survey information was undertaken by several consultants, with the support of other divisions within the ministry. Analysis of the survey information and synthesis into the final report was completed by the ministry's Policy, Planning and Program Evaluation Division.

The information provided in this report reflects the co-operation and assistance of the Ministry of Education, which had previously developed the High School Completers and Employers surveys, and allowed the Ministry of Advanced Education, Training and Technology to participate in these surveys. In addition, the assistance provided by the British Columbia Human Resource Development Secretariat was instrumental in raising awareness of the need to identify client expectations of the post-secondary system.

The completion of the research project further reflects the efforts of a number of individuals who provided advice on project development, analysis and interpretation of the results. These advisors include institutional planning contacts at a number of post-secondary institutions in the province. Also to be acknowledged are those individuals involved in student registrations who provided the names and addresses required to develop a representative sample. Other individuals who provided valuable insights and assistance throughout the project include: Neil Russell from the University College of the Cariboo; Grant Fisher from the Council on Admissions and Transfer; Lloyd Morin on special assignment to the Ministry of Advanced Education, Training and Technology; and Jim Howie from the ministry's Skills Development Division who supervised the Apprentice Survey.

Finally, the data obtained in these surveys were made possible only through the co-operation of thousands of students, apprentices and employers who volunteered their time to participate in this study. Without the co-operation of these individuals, this research could not have been completed.

Client Survey Project

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INTRODUCTION

Background

The *Client Survey Project* (CSP), initiated in the spring of 1991, comprises four research studies measuring client expectations of British Columbia's post-secondary education and training system. The purpose of the CSP is to gather and provide pertinent information to assist in planning broad future directions for British Columbia's post-secondary education and training programs.

Clients surveyed include high school completers, first-year post-secondary education students, apprentices and a cross-section of provincial employers. Students represent the direct client group of the post-secondary education system, while employers are one of the key indirect client groups. Survey research of these groups was complemented by focus group research of first-year post-secondary students and a review of the literature related to student aspirations. The research plan, developed in consultation with institutional planners, was specifically designed to identify target group expectations, to examine similarities and differences among the groups, and to determine areas where the post-secondary system may be improved. This comprehensive research approach helps to ensure the validity of results at the provincial and sub-group level.

Developing an extensive base of information on student and employer expectations is a major first step in developing British Columbia's human resources. Data collected through primary research supplement existing information on client expectations compiled by colleges and universities, various governments and public polling organizations. Together, this comprehensive body of information represents part of the ministry's contribution to the British Columbia Human Resource Development (*BCHRD*) Project.

The *BCHRD* Project is a major undertaking of the government of British Columbia involving partnership of the ministry and post-secondary education institutions, with participation from business, labour, community and equity groups. The *BCHRD* Project was launched in early 1991 to address two distinct yet interrelated challenges:

- The first important challenge emerges from the complexity of contemporary personal, ethical, and citizenship issues. Changes in social attitudes and demographics have placed increasing pressure on individuals as they relate to others in society. New technologies have created the potential for a polarized income distribution. Nations and people have become more interdependent. Environmental issues are worldwide in scope. As a result, exercising the rights and responsibilities of citizenship in democracies has become more daunting as the issues become more complicated. Citizens need to be better informed to act. Here, improved education is required for personal, social and cultural effectiveness.

- The other is economic. B.C. must be able to sustain its ability to create wealth in the next century. The world has experienced dramatic economic change. As such, B.C. businesses have found that they must compete globally to thrive in a world economy that is gradually dismantling trade barriers and is rapidly integrating through modern communications and transportation technology. Experience indicates that firms who use, keep up with, and innovate with modern technology will do well. Here again lies the importance of education and training— developing skills needed for the marketplace.

Purpose

The central question of this project is to determine whether students pursue post-secondary education primarily to attain fulfilling, well-paid careers, or whether their main interest is to obtain a general, well-rounded education. There are proponents of both sides of this issue who tend to fall into two schools with respect to the overall direction of the post-secondary system. One group argues that post-secondary education needs to focus more on providing graduates with the specific skills needed to ensure that they obtain jobs upon graduation and continue with fulfilling, remunerative careers. The other group maintains that education of the whole person — social, political, intellectual, as well as economic — should be the key focus. Education of this type will lead to good jobs and careers, though probably not in such a direct manner as the type described above. More important, it will prepare graduates for life in a complex, dynamic society.

This basic dichotomy emerged at some of the early discussions of the *BCHRD* Steering Committee. The ministry felt that it could add some useful information to the *BCHRD* discussions if it went directly to the clients of the system — primarily students as direct clients, but also employers and the public as indirect clients— to ascertain their expectations with regard to the post-secondary system. This study, therefore, attempts to find out whether this kind of "either/or" dichotomy really exists, and if so, on which side does the weight of their opinion come down.

Specifically, the research is designed to answer such questions as:

- What do students entering post-secondary programs expect to gain from the experience on which they are about to embark?
- What is the relative importance of expectations relating to jobs, careers and financial gain vis-à-vis educational/intellectual goals? How important are social and personal goals?
- How do these expectations vary across types of institutions, programs, and socio-economic groups?
- What do employers expect when they hire a post-secondary graduate?
- How do students view certain related issues and challenges currently facing the post-secondary education and training system (lifelong learning, financing education, information needs of students, etc.)?

Tasks

In order to meet the goals of this project, the following tasks were completed:

- The 1991 High School Completers Survey examines the educational aspirations and expectations of those students who have just completed grade 12.

- The 1991 Post-Secondary Student Survey examines first-year college and university student expectations of the provincial post-secondary education system.

- The 1991 Apprentice Survey examines apprentices' expectations of the provincial apprenticeship system.

- The 1991 Employer Survey examines employer opinions of British Columbia's secondary and post-secondary education systems with respect to their effectiveness in preparing students for the workforce.

- Focus Group Sessions were conducted with first-year post-secondary students to complement information collected in the Post-Secondary Student Survey.

- A Review of Literature was undertaken as well as opinion research from the Fall 1991 Decima Report.

Research for the *Client Survey Project* was undertaken between August 1991 to December 1991. A total of 5,132 usable surveys were obtained from a distribution of nearly 11,700. While the surveys consisted primarily of close-ended questions, respondents were presented with the opportunity to include additional comments and to raise other issues related to the post-secondary education (PSE) system. Response rates ranged from 57.5% among first-year PSE students to 30.6% among high school completers. Demographic data facilitated the analysis on the basis of gender, age, socio-economic status, program and institution type. Readers are encouraged to consult the TECHNICAL ASPECTS section for additional information pertaining to research methodology, administration of survey questionnaires and response rates.

TECHNICAL ASPECTS

Methodology

The *Client Survey Project* was commissioned to achieve two basic objectives:

- to define and assess the attitudes of a range of clients— high school completers, first-year PSE students, apprentices and employers— with respect to their expectations for PSE; and

- to provide a mechanism through which educators and institutions could gain a better perspective on the critical issues and concerns of clients.

Given the scope of the research objectives and diversity of the student population, four individual surveys were developed. In addition, a fifth survey of Adult Basic Education and English as a Second Language students has also been commissioned. As the data from this survey could not be obtained in the same time frame as the others, results will be released at a later date.

Each of the four questionnaires was adapted for the specific client group. While not all groups were required to answer the same number or types of questions, all client groups were asked to assess the importance, for them, of a number of expectations associated with the PSE system. The design of the various survey instruments involved considerable discussion with institutional planners, as well as preliminary field testing with respective target populations.

Survey Delivery

The sample consisted of randomly selected participants from four major target groups:

- High school (HS) completers— grade 12 students who were potentially eligible for graduation in June, 1991;
- First-year post-secondary education students— students enrolled in a post-secondary institution on either a full-time or part-time basis as of October, 1991;
- Apprentices— in the first quarter of their apprenticeship program;
- Private sector employers in British Columbia.

In addition, five focus group sessions were convened in various regions of the province. These sessions served to verify the validity of the Post-Secondary Student Survey and to provide more in-depth, qualitative information about student expectations, knowledge of the post-secondary system and student financial assistance.

The surveys were administered by contracted research firms. Assistance in sample selection was provided by the various post-secondary institutions and by the Policy, Planning and Program Evaluation Division of the Ministry of Advanced Education, Training and Technology (MAETT). Additional information pertaining to the individual surveys is contained in *Appendix A*.

The following research projects were undertaken:

- The High School Completers Survey examined the educational aspirations and expectations of those students who have just completed grade 12. Initiated by the Ministry of Education's Information Management Branch, the mail-out survey is administered to high school completers at the end of each academic year. The 1991 survey is the first to be jointly funded by the Ministry of Education and the Ministry of Advanced Education, Training and Technology. The main focus of MAETT questions was to ascertain the post-secondary expectations of high school completers. The 1991 survey was conducted by Points of View Research and Consulting Ltd. of Vancouver.

- The Post-Secondary Student Survey examined expectations of first-year students in B.C.'s public post-secondary system. The purpose was to gain insights into why students attend post-secondary education in B.C. The mail-out survey was funded by the Ministry of Advanced Education, Training and Technology and included a small number of questions provided by the Ministry of Education. The survey was developed by MAETT's Policy, Planning and Program Evaluation Division and conducted by Marcon Research and Associates, with research services provided by Lesley Bellamy from the University of British Columbia.

- The Apprentice Survey examined apprentices' expectations of the provincial apprenticeship system. The purpose of the survey was to determine the reasons for entering a particular trade, and to gather information regarding improvement of the system. The mail-out survey was funded by the Ministry of Advanced Education, Training and Technology, and administered by the ministry's Skills Development Division. It was conducted by Rivers and Associates of Victoria.

- The Employer Survey examined employer opinions of the effectiveness of British Columbia's secondary and post-secondary education systems in preparing students for the workforce. This telephone survey, first initiated by the Ministry of Education's Information Management Branch in 1990, focused solely on the K-12 education system. The 1991 survey was jointly developed by the Ministry of Education and the Ministry of Advanced Education, Training and Technology to include employer opinions of the post-secondary system. The 1991 Employer Survey was administered by R.A. Malatest and Associates of Victoria.

- Focus Group research was conducted to complement information collected by survey methods. Through discussions with small groups, students had the opportunity to provide non-structured responses to questions about expectations and experiences in the post-secondary system. A total of 34 students from a cross-section of programs, backgrounds and experiences participated in the sessions held at five post-secondary institutions — University of British Columbia, University College of the Cariboo, Selkirk College, College of New Caledonia, and the Fort St. John satellite of Northern Lights College. The sessions were conducted by Lesley Bellamy from the University of British Columbia.

Response Rates

As highlighted in Table A, response rates varied considerably across the survey strata. The return rate of 57.5% for the first-year post-secondary student sample was considerably higher than the 36% return rate for high school completers. Nevertheless, almost one-half (45.3%) of respondents contacted participated in the surveys. The overall response rate is consistent with that of large mail-out surveys.

Table A
Response Rates By Target Group

Group	No. Sent Out	No. Returned	No. NIS [1]	Valid Response Rate
Employers	1992	881	126	47.2%
HS Comp.	5000	1777	69	36.0%
1st Year PSE	3150	1751[2]	106	57.5%
Apprentices	1600	723	110	48.5%
Total	11,742	5,132	411	45.3%

[1] Not in Service, not at given address, survey returned as undeliverable
[2] Includes 384 surveys completed by telephone

Abbreviations

In the presentation of the results obtained, the following abbreviations have been used:

PSE	*Post-Secondary Education*
HS Comp.	*High School Completers*
SFA	*Student Financial Assistance*
SES	*Socio-Economic Scores (based on parents' occupation)*
P/T	*Part-Time (Work, Studies)*
F/T	*Full-Time (Work, Studies)*

Sample Characteristics

Table B highlights the characteristics from three of the four survey samples (high school completers, first-year PSE and apprentices). First-year PSE students are further collapsed by program type. The composition of the student sample populations differs across the various groups.

Table B
Profile by Program
HS Completers, First-Year PSE, Apprentices

	Sex		Age			GPA		
	% F	% M	% <19	% 19-23	% 23+	% 50-69	% 70-79	% 80+
HS Completers	60.7	39.3	-	-	-	38.6	46.3	15.1
University	60.4	39.6	51.6	31.9	16.5	6.3	42.4	48.4
University-Transfer	61.5	38.5	38.3	37.9	23.8	33.0	40.7	19.4
Career Tech.	55.9	44.1	17.0	36.1	46.9	23.2	44.9	22.2
Vocational	54.4	45.6	8.5	35.6	56.0	31.0	30.3	28.5
Apprentices	5.2	94.8	15.8[1]	33.0[2]	51.2[3]	-	-	-

[1] 20 years of age or younger
[2] 21-25 years of age
[3] 26 years of age or older

Table C profiles first-year PSE students by institution type. As evidenced in the table, a student's choice of institution is related to their parents' educational background and socio-economic score.

Table C
Choice of PSE Institution by
Parents' Educational Attainment and Occupational Status
First-Year PSE Students

	Fathers Education[1]			Mothers Education[1]			Parents SES[2]			
	% Gr.12 or Less	% Some PSE	% De-gree	% Gr.12 or Less	% Some PSE	% De-gree	% Q1	% Q2	% Q3	% Q4
University	29.6	29.8	38.2	39.0	32.7	26.2	6.6	9.7	26.0	57.7
University-Transfer	39.1	32.6	23.7	44.9	35.7	15.8	9.4	18.8	27.1	44.7
Career Tech./ Vocational[3]	47.1	32.3	14.0	57.9	26.2	11.3	13.6	17.5	30.9	38.0

[1] Totals may not add to 100% due to respondents not knowing education of their parents.
[2] Based on average parents SES compared to that of the population as a whole. (See Notes, p.72 for description of SES index.)
[3] There were no significant differences among students in career technical and vocational programs.

Table D highlights the sample obtained from the Employer Survey. As the Ministry of Advanced Education, Training and Technology wished to obtain a higher number of responses from larger employers (20+ employees), oversampling of this group resulted in the sample having a higher proportion of firms with 20 or more employees than would normally occur given the employer population distribution.

Table D
Distribution of Employees by Size of Business
(No. of Employees)

Number of Employees	Sample	Estimated Actual[1]
0 - 19	81.8%	91.3%
20 - 49	9.9%	4.4%
50 - 99	3.2%	1.7%
100 +	4.5%	2.6%
Missing	0.6%	-

[1] Statistics Canada, BC Business Register, 1988

Interpretation of Results

The results obtained in these surveys represent an approximation of the actual perspectives of the population studied. The use of random sampling techniques allows one to determine the range in which the actual or true proportion would occur. It should be mentioned that survey respondents are more likely to be interested in further education and more likely to be better informed than non-respondents. While this does not diminish the validity of the results, it limits their generalization. Outlined in Table E are the maximum estimated sample errors for the four client surveys.

Table E
Estimates of Sample Error for Proportions by Target Group

Group	Sample	Maximum Error 19 times out of 20
HS Completers	1777	±2.3%
First-Year PSE	1751	±2.3%
Apprentices	723	±3.6%
Employers	881	±3.3%

It should be noted that for sub-group responses, the sampling error will be higher.

Statistical Differences

In comparing responses between two groups (e.g., male and female respondents), it was necessary to determine whether a statistical difference exists in terms of the opinions expressed by each group. In this context, Chi-square tests (at the 95% confidence level) were performed. Only those sub-groups in which the Chi-square value was statistically significant at .05 or less are reported.

Report Structure

Results of the CSP are presented in three reports:

Summary: Provides a brief overview of the CSP, including the purpose of the project, the research tasks undertaken, and the CSP's relationship to the ministry's B.C. Human Resource Development Project. The Summary highlights the main findings of the CSP and concludes with a discussion of some policy issues relating to the future of B.C.'s post-secondary education and training system.

Survey Report: Highlights the key findings of the Client Survey Project, including cross-group comparisons of responses where applicable. This report is collapsed into six sections.

Section 1 (IMPORTANCE OF EDUCATION AND TRAINING) provides a general overview of the importance of education and training from the perspective of students, apprentices, employers and the general public.

Section 2 (EDUCATIONAL ASPIRATIONS OF STUDENTS) examines the highest level of education that both high school completers and first-year PSE students hope to achieve. The analysis looks at factors affecting a student's decision not to enrol in PSE, as well as factors affecting post-secondary participation generally.

Section 3 (IMPORTANCE OF EXPECTATIONS) provides insights into why students and apprentices enrol in post-secondary programs, based on their expectations of the education and training system. Student expectations are categorized into Career/Financial, Educational, Personal and Social, with each category comprised of specific factors.

Section 4 (CROSS-SECTIONAL ANALYSIS OF STUDENT EXPECTATIONS) identifies differences and similarities in expectations among first-year PSE students. The analysis examines first-year student expectations by institution/program stream, program discipline, age, gender, and socio-economic status.

Section 5 (SELECTED ISSUES) focuses on a number of important issues facing the education and training system. These include: the need to strike a balance in the system between applied education programs and academic instruction; the notion of lifelong learning; the challenges students face in financing PSE; the issue of whether students are confident in their choice of program and institution; and the degree to which students are satisfied with the information they receive prior to enrolling in post-secondary education.

Section 6 (EMPLOYER SATISFACTION) examines the degree to which employers are satisfied with the students and graduates of B.C.'s post-secondary system.

Technical Appendix: Summary Statistics for the four surveys are presented in tabular form. In addition, the technical appendix contains copies of the questionnaires and covering letters.

Section 1
IMPORTANCE OF EDUCATION AND TRAINING

The rising demand for higher education coincides with the radical transformation of Canada from an industrial society to a society characterized by economic globalization, a labour force shifting from the goods-producing sector to the service sector, and the rapid diffusion of technology into the work place. The Economic Council of Canada, in its report Good Jobs Bad Jobs (1990), summarized the impact of these factors on today's labour force:

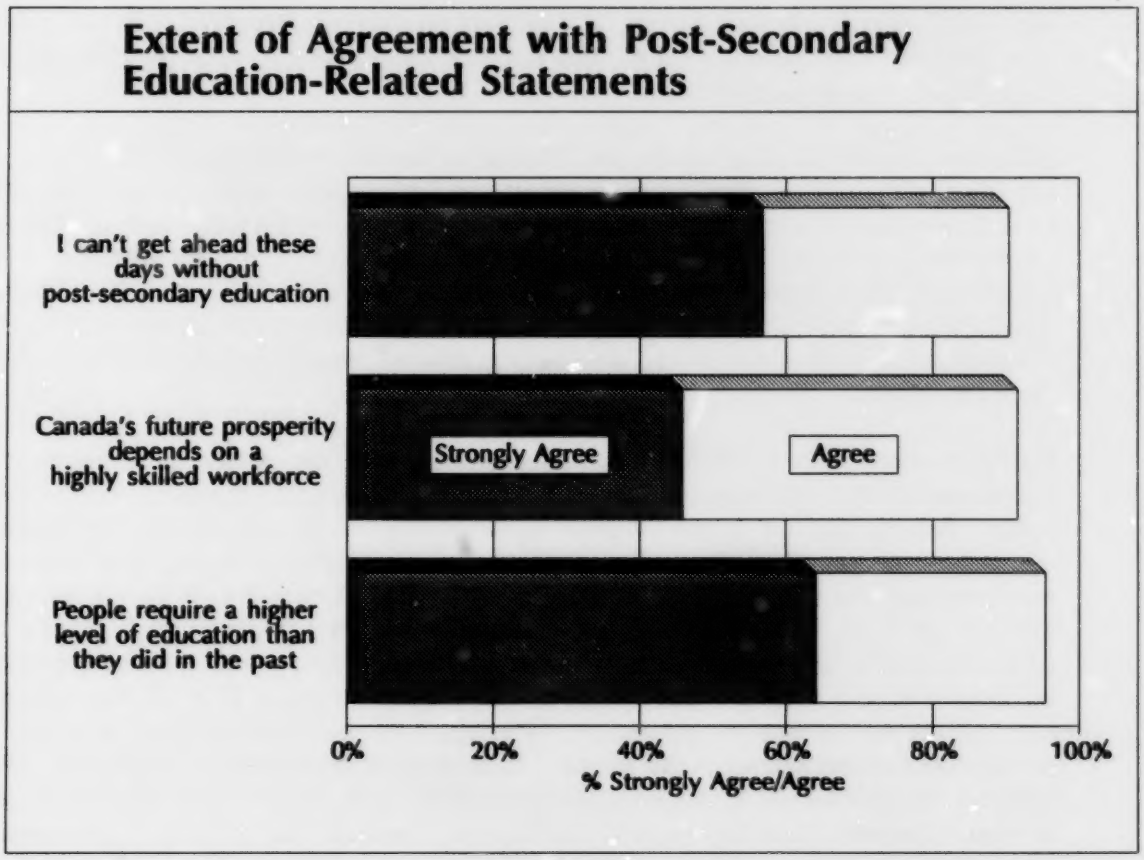
> *The growth of services, along with the information explosion and the internationalization of business activity, is fuelling the demand for an increasingly well-educated and skilled work force. Canada's future economic welfare will be dictated in no small measure by its capacity to develop human resources. The "education and training" imperative will also be compelling for individuals, since employment experiences will be less and less favourable for those who have skill deficiencies. In fact, our analysis suggests that the segmentation of the labour market into "good-job" and "bad-job" sectors is likely to raise considerable challenges for policymakers.*[1]

Effective competition in an international economy requires knowledge-intensive service and manufacturing activities employing an expert and flexible work force. Despite the difficulty in defining the concept "skill", the Economic Council of Canada asserts that today's employers are seeking individuals with qualities that include "basic academic competence, creativity and initiative, analytical and problem-solving abilities, adaptability, and communication and interpersonal skills (p.13)." Evers, Rush, and Krmpotic (1991), in their research on skill development of university graduates, report that employers concur with these assertions.

Research conducted in British Columbia affirms that the notion of "human capital", introduced in 1960 by Theodore Schultz, is well entrenched in the minds of British Columbia youth. Schultz defined human capital as an investment in oneself, for "by investing in themselves, people can enlarge the range of choice available to them. It is one way free men [women] can enhance their welfare (p.314)." B.C. Research (1990) reported that the majority of both continuing and non-continuing students believed that post-secondary education would help them to become better educated, prepare them for jobs, increase their incomes, and give them a wider choice of jobs. Of those grade 12 graduates who did not continue to post-secondary education, 84% reported that they planned to attend some post-secondary institution in the future. In interviews conducted in 1989 and 1990 with British Columbia Grade 12 students, Bellamy (1990) reported that most students, regardless of their intended post-high school destinations, believe that without a post-secondary education, their lives, in terms of employment, quality of life, and future career advancement, would be compromised.

Survey results indicate that students and apprentices in B.C.'s universities, colleges and institutes recognize the value of post-secondary education and training. For example, as highlighted in the accompanying chart, the great majority of PSE students agree that they need post-secondary education to get ahead in life; that people generally require higher levels of education than in the past; and that economic prosperity depends on a highly skilled workforce. While students believe that PSE should help prepare them for a particular job or career, the findings indicate it is difficult to separate the need to acquire marketable job skills from the desire for broad knowledge through a liberal education. These results corroborate one of the conclusions reached in the Report of the Commission of Inquiry on Canadian University Education:

> *The Commission concludes that there is, and always will be, a healthy tension between what might be termed the utilitarian and the cultural roles of the university, but that this tension is diminishing as the economy demands students prepared for a lifetime of change and adaptation.* [2]



Results from the Employer Survey show that B.C. employers rely heavily on the province's education and training system as a primary source of qualified labour. As such, employers recognize the value of academic programs, yet stress the importance of applied and job-related education programs. For instance, more than 85% of employers view applied and job-related programs as important or very important, while fewer than 70% view academic and professional programs as important or very important.

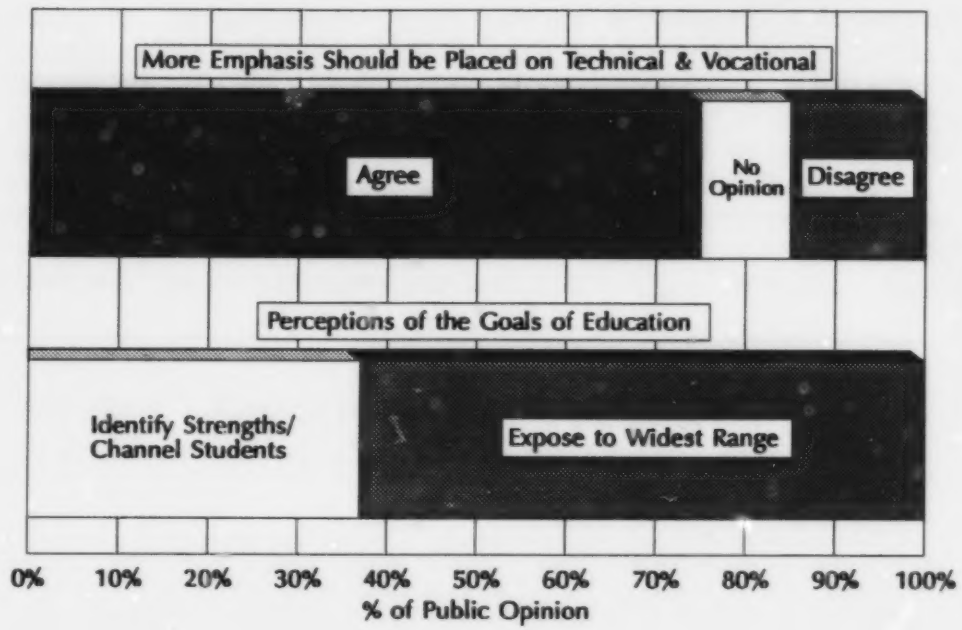
In terms of skill requirements, however, employers generally agree that communication skills are very important, even more important than specific technical skills. This is somewhat ambiguous given the high value employers place on applied and job-related programs. B.C. employers also indicate that skill requirements for entry level positions are rising, and that an increasing number of jobs now require some post-secondary education. As shown in Table 1-1, more than two-thirds of all employers (87.5% of large employers) agree or strongly agree that entry level skill requirements are higher today than five-10 years ago.

Table 1-1
Agreement that Entry Level Skill Requirements Have Increased in the Past Five-10 Years by Employer Size

Number of Employees	% Agree/ S. Agree	% Neutral	% Disagree/ S. Disagree	% No Opinion
1-4	66.8%	7.0%	22.3%	3.9%
5-19	68.5%	5.5%	22.1%	3.9%
20-49	77.0%	5.7%	16.1%	1.2%
50-99	67.8%	0.0%	32.2%	0.0%
100+	87.5%	5.0%	7.5%	0.0%
Average	**69.2%**	**6.0%**	**21.2%**	**3.6%**

Looking at the general public's perspectives on the goals of our education system (Decima Report, Fall 1991), nearly two-thirds believe students should be exposed to the widest range of opportunities, while 37% believe students' strengths should be identified and channelled. At the same time, almost 80% of the general population think greater emphasis should be placed on technical and vocational education. In spite of these seemingly contradictory opinions, the public is virtually unanimous in its belief that a good education is key to success.[3]

Public Opinion of Education and Training



The results of the CSP are supported by focus group research. Participants were asked to respond to the following statement: "I can't get ahead these days without a post-secondary education." Agreement with this statement was unanimous. The following are some of the participants' comments.

> *"I worked for five years in a law office...I advanced as far as I could go. I had to come back to school to get any further."*

The work place of today was described as complex. For example, in a field such as day care:

> *"...these days it isn't simply a matter of custodial care. Now, psychology and learning theory is important."*

Today's society was described as:

> *"...so competitive, you have to have that education, because right now it's whoever knows the most is the one who gets the job. Gone are the days where one stayed in the same career for a lifetime. Redundancy in jobs is more frequent, and constant upgrading is required."*

Students were also invited to respond to the statement: "Canada's future prosperity depends on a highly skilled work force." In the main, participants agreed that a more highly skilled workforce is the key to the future.

Participants felt that individual and national prosperity depend on a skilled and educated work force. Students asserted: "that's why we're here" and "we're doing something personally about it". However, becoming more highly skilled is an increasingly onerous endeavour. Unless individuals are able to obtain the skills, a skilled work force will never be a reality. Several individuals held the strong sentiment that:

> *"on one hand our future as a country depends on us being educated, but on the other hand, it's damn hard to get educated."*

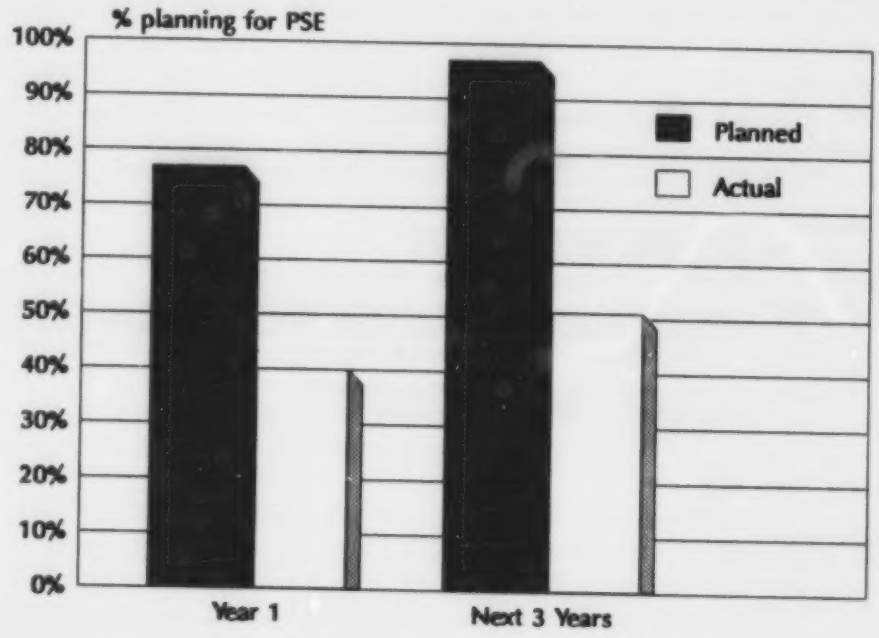
Students added that not only do our economic prosperity and personal standards of living depend on a highly skilled work force, but so do issues of national unity and tolerance of differences. Several individuals stressed the importance of learning a second language and exposure to other cultures which to date has been a "gross failure of the school system".

Section 2

EDUCATIONAL ASPIRATIONS OF STUDENTS

Both high school completers and first-year PSE students report very high aspirations for higher education. More than three quarters plan to enrol in a college or university program immediately following secondary school. Such a high percentage of direct entries is unlikely, however, since in recent years only about 40%[4] of graduates entered a provincial post-secondary institution immediately after high school. In addition, nearly all high school completers (97%) intend to enrol in PSE sometime during the next three years. Looking at college entrants as an indication of delayed post-secondary enrollments, just over half (51%) of 1986 high school completers actually entered a college program in the three years following secondary school. This figure, however, does not include out-of-province enrollments.[5]

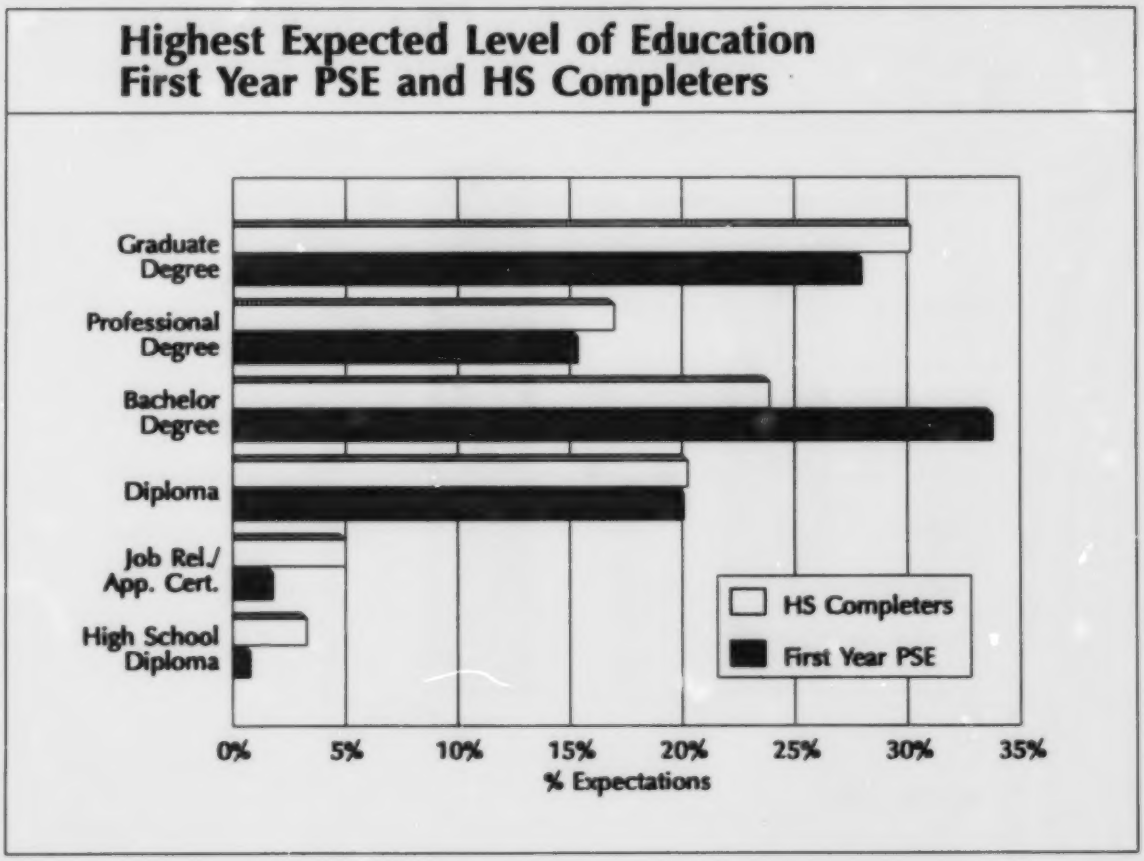
HS Completers Planning for PSE Planned vs Actual*



* LINK File 1990

High school completers also possess high aspirations in terms of the post-secondary institution they plan to attend. Among those high school completers who planned to enter PSE last fall, 47% planned to enrol in a university program, 38.2% in a community college program and 13.8% in a B.C. university-college. These aspirations generally reflect the actual numbers of students who entered a provincial post-secondary institution immediately following secondary school in 1989— 46% in college academic programs, 40% in university programs and 14% in career/technical programs.

Even more hopeful are the aspirations of high school completers regarding educational attainment levels. Although only a small percentage (15%) of the 25-44 population actually possess a first (10%) or second degree (5%), nearly 70% of high school completers anticipate attaining a first degree, while 30% expect a second degree. Although degree completion rates are rising, at the present time only about one-third of those students who begin a college academic program, and one-half of direct university entrants, in fact complete a first degree.[6]



Aspirations of first-year PSE students are generally lower than those of high school completers. Moreover, those first-year students who entered directly from high school also have higher aspirations than those who delayed PSE enrollment. It appears that educational aspirations diminish somewhat with age. A higher percentage (47% vs 43%) of high school completers expect a graduate or professional degree as their highest level of PSE, yet more first-year PSE students (34%) expect bachelors' degrees than do high school completers (24%). Given the increasing number of delayed first-year entries, it is not surprising that, as a group, aspirations of first-year students are generally not as high.

Nearly two-thirds of first-year students anticipate enrolling in at least one more credit program upon completion of their current program. This highlights the importance of education and training generally, and the notion of continual upgrading and lifelong learning.

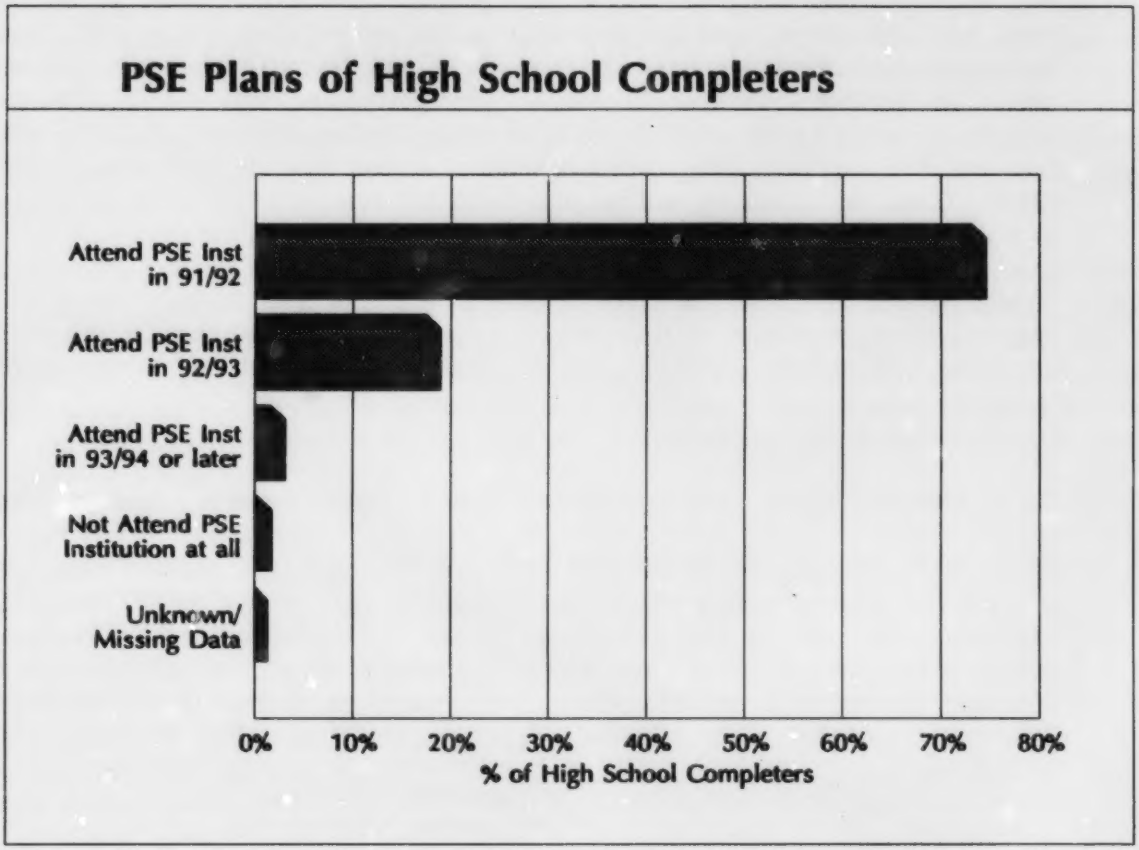
2.1 Selected Factors Affecting Students' Decision Not to Enrol in a PSE Program

Of the 1,777 high school completers who responded to the survey, the vast majority (98%) indicate they plan to continue their formal education or training at a B.C. post-secondary institution either now or some time in the future. As highlighted in the following chart, roughly three-quarters indicate that they intend to go directly from high school to a post-secondary institution in the 1991/92 academic year. One in five high school completers state that they intend to take one year off prior to enrolling at a PSE institution, while 3% of high school graduates plan to delay their post-secondary education by two or more years. Only 2% of high school completers state that they do not plan to continue their education or training.

Reasons cited by the 38 high school completers for not pursuing post-secondary education or training include: affordability (50%); disinterest in further education or training (46.4%) or lack of abilities (37.5%); and insufficient entry requirements (34.4%).

It should be emphasized that the attitudes held by the high school completers sample do not necessarily reflect the attitudes of all secondary students. For example:

- The high school completers survey included only those students who were enrolled in secondary school as of May, 1991. The sample did not include drop-outs or those students who were not potentially eligible to graduate from secondary school. It is estimated that 37% of high school students do not graduate.[7]



2.2 Analysis of Factors Affecting Student PSE Participation

Given the considerable discrepancy between the proportion (74.6%) of high school completers who indicate their intentions to continue their education or training in a post-secondary institution immediately after graduation, and the proportion (40%)[8] that actually do, analysis was undertaken to determine why some graduates do not realize their initial post-secondary expectations. Characteristics of high school completers are compared with those of students 18 years or less currently enrolled in provincial post-secondary institutions. As detailed in Table 2-1, it appears that the major difference between students who indicate that they would like to attend a post-secondary institution and students actually enrolled is their academic achievement. For example, among the 1,325 high school completers who intend to enrol in a post-secondary institution in the next year, 38.6% had an overall Grade Point Average (GPA) of either a C or D grade; however, only 19.7% of younger first-year PSE students (less than 19 years) who actually enrolled in a post-secondary institution had an overall GPA of either a C or D grade.

As highlighted in Table 2-1, there are <u>not</u> significant differences in the socio-economic profiles of high school completers who intend to enrol in a PSE institution in 1991/92, and younger students (18 years) who have actually enrolled in a first-year program at a B.C. post-secondary institution in 1991/92.

Table 2-1
Characteristics of HS Completers Planning for PSE Next Year; Characteristics of 1st Year PSE Students < 19 Years of Age

Characteristic/Group	Population	HS Comp. (N=1325)	1st Year PSE (N=544)
Grade Point Average:			
A		15.1%	33.9%
B		46.3%	42.2%
C		32.5%	19.3%
D		6.1%	0.4%
Unable to Answer		-	4.2%
Actual Inst.[1] / Preferred Inst.[2]:			
BC University	38.7%	47.3%	
BC University-College	15.2%	13.8%	
BC College	46.1%	38.2%	
Highest Expected PSE Level[3]:			
Less Than Grade 12	30.9%	N/A	N/A
Apprentice / HS Diploma	23.4%	4.2%	2.0%
College Diploma	31.1%	15.2%	11.6%
Bachelor Degree	10.0%	23.6%	32.3%
Prof. / Post Grad. Degree	4.8%	53.8%	54.1%
Unsure	N/A	3.2%	N/A
Avg. Socio-Economic Score (SES):			
Father		53.1	54.1
Mother		47.2	46.3
Combined Avg.		50.2	50.2
SES Quartiles: Students' Parents			
Lowest	25%	10.2%	10.7%
Lower Middle	25%	18.6%	16.2%
Upper Middle	25%	27.5%	27.6%
Highest	25%	43.7%	45.5%
Education of Father[4]:			
< Gr. 12	47.4%	21.2%	19.3%
HS Diploma	11.6%	14.2%	14.7%
App/Voc/Trade	19.6%	16.4%	14.2%
Comm. College Diploma	7.7%	6.5%	8.8%
Some University	2.1%	7.3%	10.7%
University Degree(s)	11.6%	29.5%	28.8%
Not Known	-	5.0%	3.5%
Main Source of Financing:			
Parents		49.1%	47.3%
Student Loans		12.9%	10.3%
Scholarship/Burs.		9.9%	13.6%
Savings		13.0%	15.4%
P/T Work		9.2%	8.7%
F/T Work		1.4%	0.4%
Other		4.4%	4.1%

[1] Actual distribution as of fall 1990 (first time, 1st year students) - Source: LINK File

[2] Among those students who selected a B.C. institution

[3] Total population aged 25-44 years (1986 Census)

[4] Male population aged 45-64 years (1986 Census)

However, there are some differences between the expectations of grade 12 post-secondary candidates and actual first-year PSE students. For example, while 47% of high school completers who hope to continue in a provincial post-secondary institution cite a B.C. university as their preference, only 39% of the first-year post-secondary population enrolled in a B.C. university. It appears that students who are not accepted at a B.C. university switch to a university-college or college. In contrast, the proportion of first-year students enrolled in B.C. colleges is equivalent to the proportion of high school completers who expect to enrol in such institutions.

There are only modest differences in the socio-economic background of high school completers (father's highest level of education, parents' socio-economic scores) who intend to enrol in a post-secondary institution and the profile of younger students (18 years or less) that actually enrolled in a post-secondary institution in 1991/92.

2.3 Access Issues

There appears to be little difference between the profile of high school completers intending to continue on to a post-secondary institution and actual first-year PSE students. Yet, it is clear that there is a significant difference in terms of the socio-economic characteristics of PSE students (or students intending to continue on to a PSE institution) compared to the population as a whole. For example, the proportion of first-year PSE students who indicate that their father's highest level of education is a university degree or higher (28.8%) is considerably higher than the 11.6% of males aged 45-64 years old who have a university degree. Similarly, the average socio-economic scores for parents of high school completers intending to continue their education (50.2) and first-year PSE students (50.2) was markedly higher than that of the population as a whole (40.0).

The survey data suggest that student PSE aspirations are established before students complete secondary school. It appears that there is no filtering at the post-secondary level in terms of the profile accepted at the PSE institutions: the profile of younger (18 years or less) first-year PSE students is similar to the profile of students who apply to the institutions. However, the group of students who apply to PSE institutions does not contain a representative proportion of students from families where the socio-economic status of the parents' occupation, or the level of education, is lower.

Section 3
IMPORTANCE OF EXPECTATIONS

3.1 Student Ranking of Individual Expectations

High School completers and first-year post-secondary students were asked to rate the importance of a number of educational goals related to career, educational, personal and social expectations. The purpose was to identify the differences and similarities regarding expectations and to gain insights as to why students enrol in PSE and training. In general, client expectations of PSE are very similar. They are grouped as follows:

Career/Financial
- *enhance/upgrade my existing skills*
- *improve/establish myself financially*
- *prepare for a job or career*
- *decide on a career*
- *qualify for a better job*
- *have a wider range of career/job options*

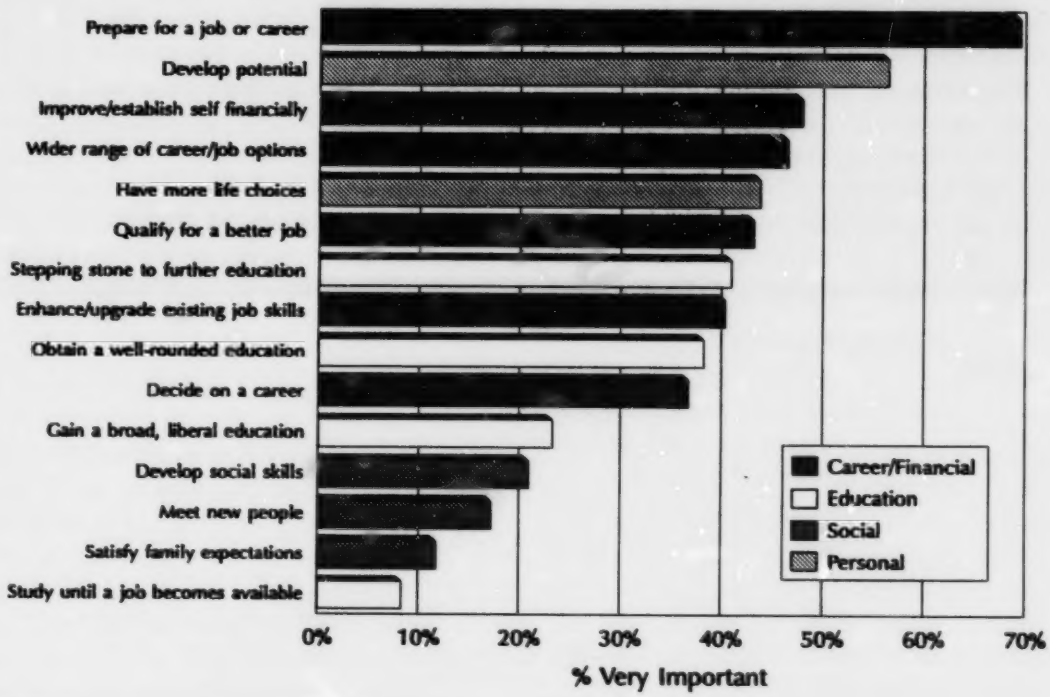
Educational
- *gain a stepping stone toward further education*
- *gain a broad liberal education*
- *study until a job becomes available*
- *obtain a well rounded education (PSE) / increase my general level of education (HS completers)*

Personal
- *develop my potential*
- *have more life choices*

Social
- *develop my social/interpersonal skills*
- *meet new people*
- *satisfy my family's expectations*

Expectations are reported in descending order based on *very important* responses. Two main conclusions can be drawn: students have very high expectations, and their expectations are diverse across the major categories identified above. For instance, approximately three-quarters of students indicate it is very important that the PSE system assist them in preparing for a job or career. Similarly, a significant portion of students rate personal expectations (e.g., development of potential, having more life choices) as very important.

Importance of Accomplishing Expectations of Post-Secondary Education Programs

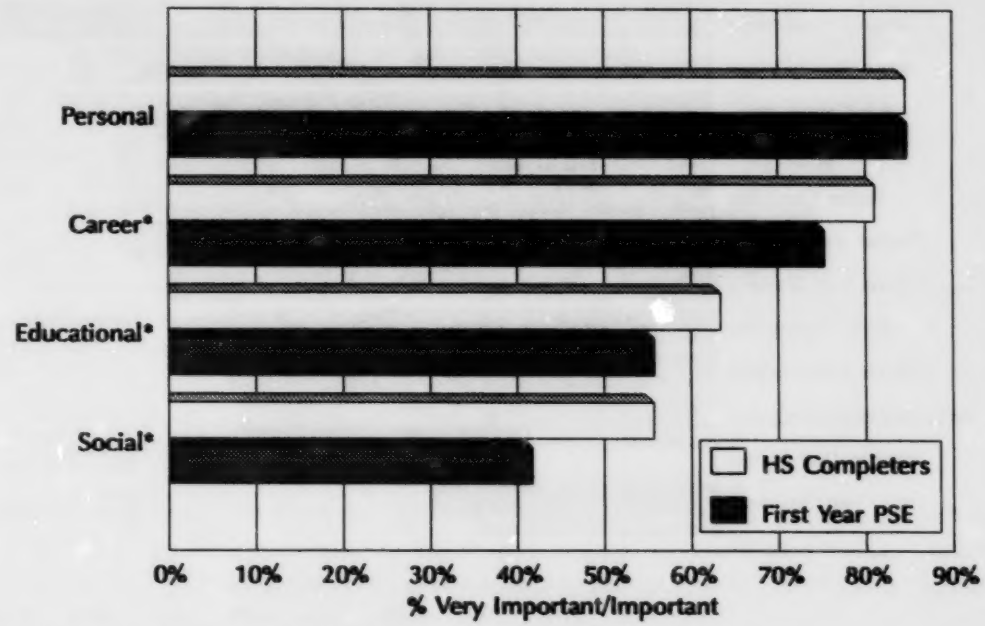


Both high school completers and first-year PSE students are consistent in what they consider to be of relatively less importance. It is interesting to discover that satisfying family expectations is one of the lowest-rated goals among students. Although there is a clear relationship between socio-economic status/education level of parents and students' decisions to pursue PSE (See Access Issues, p.25), it is somewhat paradoxical that students do not indicate that satisfying family expectations is an important goal in pursuing PSE.

3.2 Changing Expectations — High School Completers and First-year PSE Students

The importance high school completers place on various expectations is generally somewhat higher than first-year PSE students. In spite of this difference, all students share similar views regarding career, educational, personal and social expectations. Collectively, students place the highest degree of importance on accomplishing personal and career-related expectations, followed closely by educational aspirations. The category in which expectations diverge the most between high school completers and first-year PSE students is the social area — with high school completers placing considerably higher importance on these expectations than students who have just entered the system.

General Importance of Expectations for First Year PSE and HS Completers

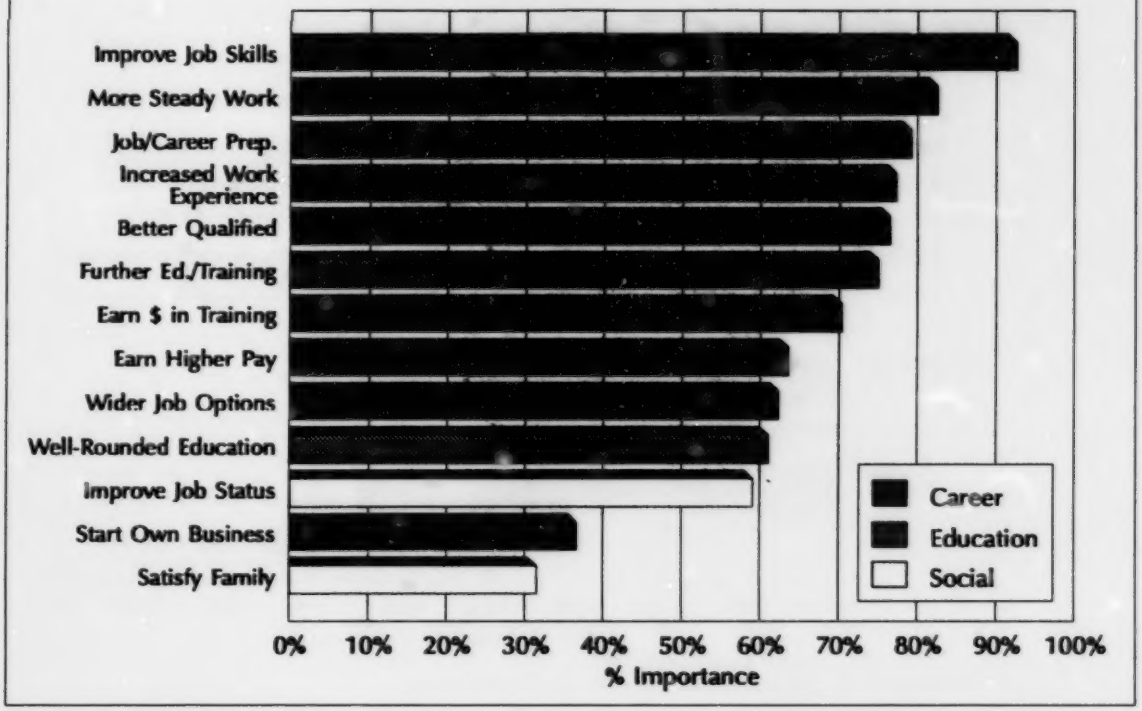


* Average of all goals associated with particular group

3.3 Apprentice Ranking of Individual Expectations

The nature of apprenticeship programs would suggest that apprentices enrol for a specific purpose, and that the idea of further education beyond the program would not be of major importance. However, three-quarters of apprentices indicate that they consider their program as a stepping-stone to further education, while over 60% believe attaining a well-rounded education is important or very important. These results highlight the similarities in expectations between apprentices and students generally, while also showing that apprentices, too, recognize the necessity of continual upgrading and lifelong learning.

Apprentices Rankings of Selected Expectations By Level of Importance



An interesting characteristic of apprentices is their desire to secure steady work through their program. Given that, on average, eight years have passed between secondary school and apprenticeship enrollment, most apprentices are at a stage where security of employment is a high priority. In addition, approximately four in five apprentices view their program as a means to "improving their job skills" and/or "preparing them for a job or career". The point is that the expectations and attendant goals of apprentices are very similar to that of students. As highlighted in Table 3-1, the vast majority of apprentices see their programs as both a means of "developing potential" and "gaining knowledge", and as a means to "establishing or advancing a career".

Table 3-1
Importance [1] Attached to Selected Career, Educational Expectations
HS Completers, First-year PSE, Apprentices

Expectation	1st Year PSE	HS Completers	Apprentices
Wider Range of Career / Job Options	81.5%	81.0%	62.4%
Step Towards Further Education / Training	72.7%	76.2%	75.1%
Obtain a Well-Rounded Education [2]	72.1%	85.4%	61.1%
Enhance / Upgrade Job Skills	67.3%	74.1%	92.7%

[1] Citing important/very important; Apprentices - very/extremely important
[2] HS Completers - Increase my general level of education

3.4 Summary

The information obtained from the three student surveys and focus group research suggests that students place high expectations on several personal, career and educational factors. In particular, the following observations can be made with respect to student expectations:

- Students in all institutions place the highest relative importance on two goals: "preparing for a job or career" and "developing their potential". Two-thirds of all students surveyed stated that these were "very important" expectations of the system.

- Students are in agreement as to what goals/expectations were of lesser relative importance. Less than 15% of respondents cited "study until a job becomes available" or "satisfy family expectations" as very important goals of the post-secondary system.

- In general, students' expectations decline modestly as the student moves through the education system. First-year post-secondary students attach lower importance to most expectations than do high school completers.

Section 4

CROSS-SECTIONAL ANALYSIS OF STUDENT EXPECTATIONS

The results of the first-year post-secondary survey and the apprentice survey suggest that the two groups share similar expectations and goals. Nonetheless, upon examination of client expectations by various sub-group classifications, the analysis shows that significant differences do exist within each client group. The following analysis looks at student expectations by program area, institution type, age, sex and socio-economic score. To enhance the clarity of the results, the presentation of the data includes a grouping of the most "representative" variables on the basis of factor analysis research. Expectations that most closely resemble career, personal, educational and social expectations are selected as representative of each group. The groupings and representative variables are as follows:

Career
- *prepare for a job*
- *improve self financially*

Personal
- *develop potential*
- *have more life choices*

Educational
- *obtain well-rounded education*
- *stepping stone to further education*

Social
- *develop social and interpersonal skills*

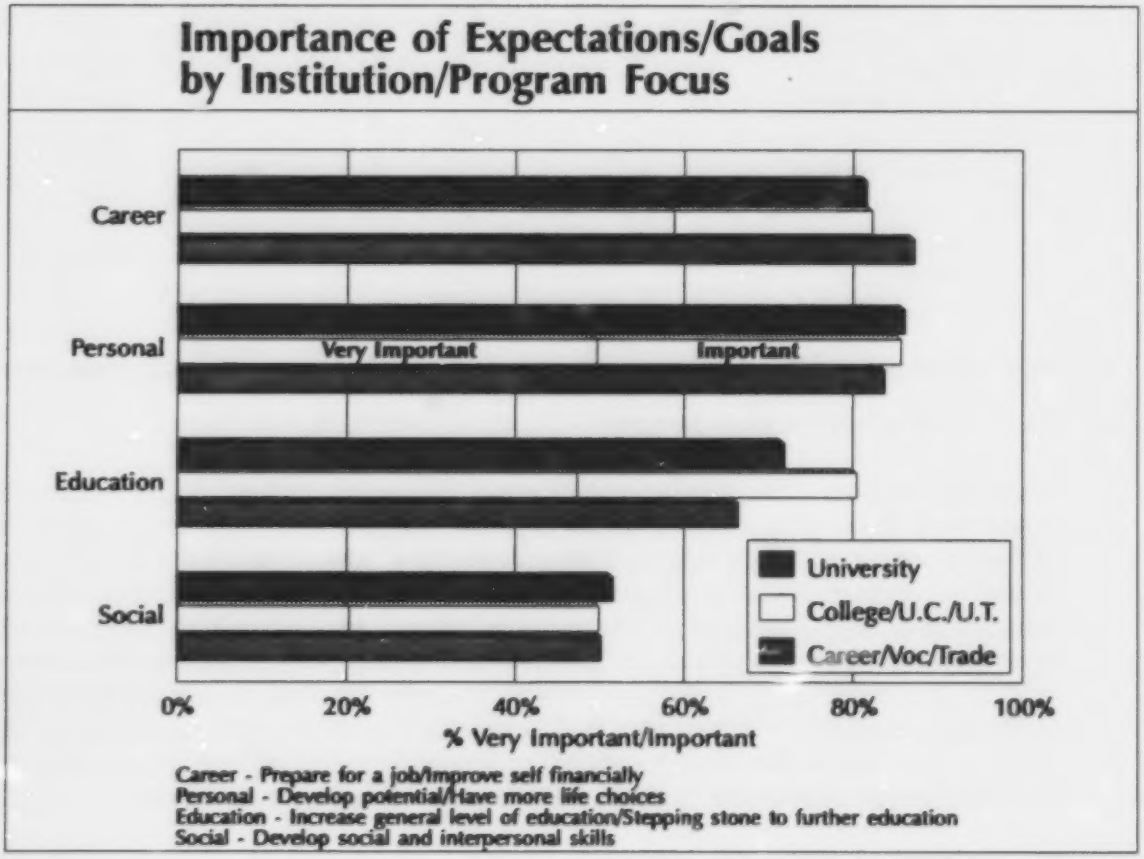
4.1 Institution/Program Stream

Given that analysis of the data by institution type (university, college, and university-college) would result in the grouping of students enrolled in significantly different programs (ie, the college grouping would include students enrolled in academic university transfer programs as well as career/vocational programs), analysis of data was undertaken on the basis of program and institution type. The purpose of this analysis was to ascertain whether significant differences in opinion exist between first-year post-secondary students enrolled in a degree program at a B.C. university, students enrolled in an academic program (university-transfer or degree) at a B.C. university-college or college, and those students enrolled in career technical or vocational programs in a B.C. college or university-college. The distribution of students by these four program streams are as follows:

• University-degree Program	24.5%
• College/University-College (university transfer/degree)	34.7%
• College/University-College (career technical)	24.0%
• College/University-College (vocational)	16.8%

Analysis was undertaken to establish the extent to which students in career technical programs and students in vocational programs shared similar expectations for post-secondary education and training. In general, there were no statistical differences in opinion held by the two groups. However, students enrolled in vocational programs attached greater importance to improving/establishing themselves financially (89% indicated important or very important) than did college students enrolled in a career technical program (79.2% indicated important or very important). Similarly, a higher proportion (86.2%) of students in vocational programs noted that it was important or very important to enhance or upgrade their job skills than did students in career technical programs (71.4%).

As there were no statistical differences in expectations among those students in career technical programs and those in vocational programs for the representative variables selected, data on these two groups have been combined for the purpose of arranging variables under career, personal, educational and social expectations.



Generally, students from across all institution/program streams share similar high level expectations with regard to career and personal goals. Students in career/vocational programs, however, place relatively more importance on career expectations, reflecting the job-related nature of most of these programs. Conversely, students in transfer programs emphasize the importance of educational expectations in relation to other students. This is consistent with the aspirations of most transfer students anticipating a move to a university. It is interesting to note that traditionally most student transfers have been from colleges to universities, while in recent years the largest increases have occurred in transfers to colleges from universities and other colleges.[9]

4.2 Program Discipline

Data on first-year PSE students are collapsed into eight disciplines to determine whether student expectations differ by the various programs of study. The analysis includes data on four-year programs only. As with previous findings, first-year PSE students in various disciplines place high value on personal, career and educational expectations. The level of importance students place on personal expectations is consistent across disciplines, as illustrated by the low average absolute deviation of 1.3%. This is not necessarily the case in terms of career and educational expectations. For example, over 90% of students in education programs indicate that career expectations are important or very important, compared to roughly three-quarters of social science students. Similarly, more than four of every five students in arts/humanities programs indicate educational expectations to be important or very important, compared to 64% of students in engineering and applied sciences.

Table 4-1
Importance[1] of Selected Expectations By Discipline
Students Enrolled in Four-year Degree/University Transfer Program

Discipline	Personal	Career	Educational	Social
Average - All Disciplines	**85.8%**	**82.0%**	**71.9%**	**52.2%**
Arts/Humanities	88.5%	77.6%	81.9%	53.9%
Bus./Commerce	84.1%	88.8%	65.9%	54.1%
Eng./Applied Sc.	86.9%	82.2%	64.3%	47.6%
Health/Nat. Sc.	85.0%	82.5%	71.3%	60.0%
Social Sc.	83.8%	76.3%	72.6%	47.1%
Education	84.8%	90.9%	80.8%	51.9%
Math/Phys. Sc.	86.1%	83.6%	71.8%	49.7%
General/Other	85.0%	82.9%	81.8%	47.1%
Average Absolute % Deviation	**1.3%**	**3.6%**	**5.5%**	**3.6%**

[1] Includes those responses citing expectations as important/very important.

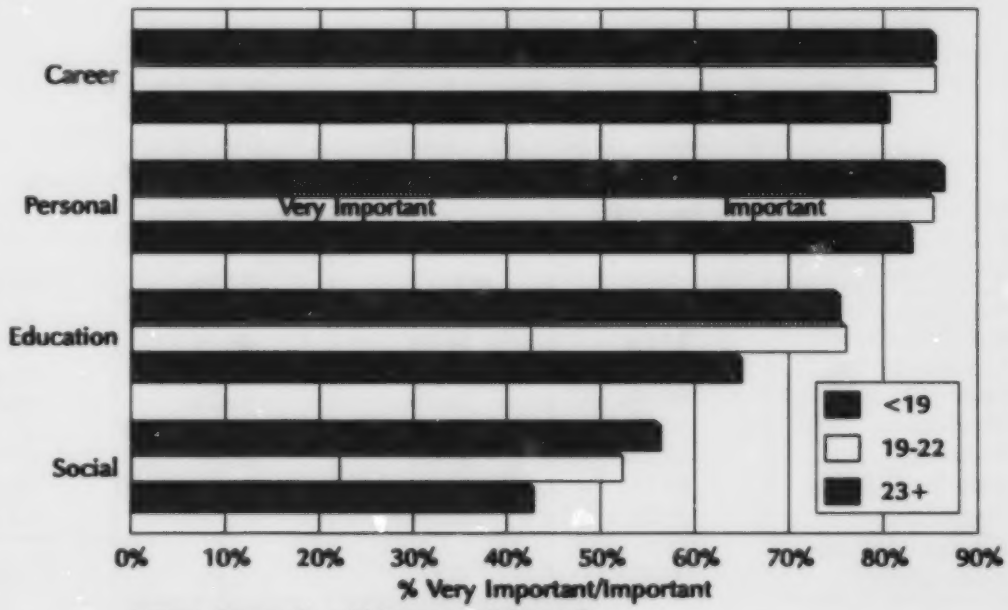
4.3 Age

Most studies of this nature focus on the educational aspirations and expectations of high school youth; few, however, address the aspirations and expectations of adults. In their 1986 study, Stephenpohl and Shipton (1986) commented that the fastest growing segment of the post-secondary population is comprised of adults, though little attention has been focused on their needs.

For the purposes of this analysis, data on first-year PSE students are collapsed into three age categories — under 19 years, 19-22 years and over 23 years. The age distribution is rather evenly spread, with each category accounting for roughly one third of respondents. The high percentage (69%) of entering students over 19 years old strongly reflects the growing proportion of delayed enrollments following secondary school.

One of the major findings of this analysis is that older students (23+) possess lower expectations generally than do younger students. Although expectations seemingly diminish with age, students across all ages strongly emphasize the importance of career, personal and educational goals. In contrast, students, particularly those over 23 years, again place relatively much less emphasis on meeting social and interpersonal goals. It may well be that older students have already attained some of the goals sought.

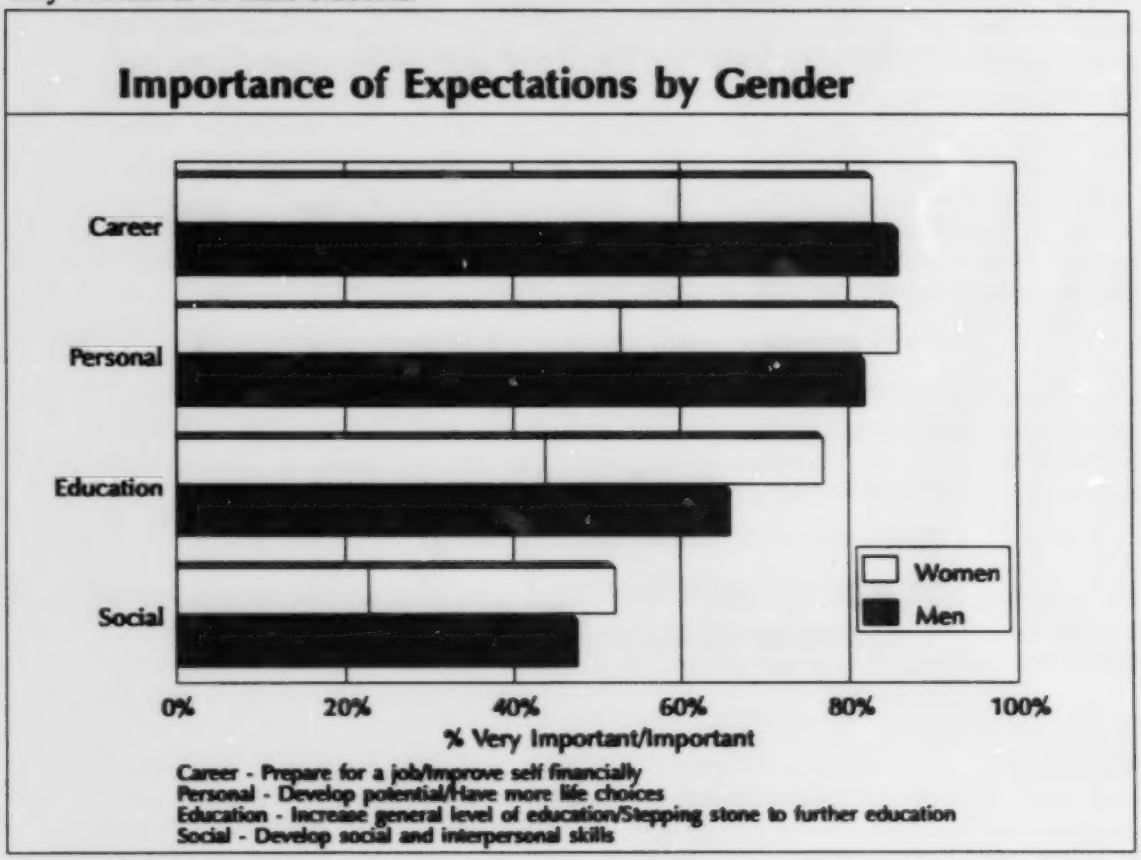
Student Expectations by Age



Career - Prepare for a job/Improve self financially
Personal - Develop potential/Have more life choices
Education - Increase general level of education/Stepping stone to further education
Social - Develop social and interpersonal skills

4.4 Gender

Among the more than 1,700 first-year respondents, approximately 59% are female. The importance females place on all expectations is generally higher than male students, except in regards to career-related goals where both are roughly equal. Female students, in particular, stress the importance of increasing their general level of education and using PSE as a step towards further education. More than three-quarters of female students indicate that their current program is important as a step towards further education, compared to only two-thirds of male students.



4.5 Socio-Economic Status

Socio-economic background is examined to determine whether student expectations differ by economic class. Data on respondents were collapsed into quartiles based on the socio-economic score of their fathers' occupations. Consistent with other results, the findings reveal that, regardless of parents' socio-economic status, student expectations for PSE are very similar.

To illustrate this point, the seven selected PSE goals are ranked based on very important and not important responses (5-point scale). As highlighted in the accompanying chart, all students ranked "preparing for a job or career" and "developing their potential" as their top two priorities, while the bottom three goals are similar across each socio-economic quartile. In fact, the only divergence in opinion occurs among students in the top quartile who rank the importance of having "more life choices" higher than other students.

PSE Student Expectations by Socio-Economic Background

	Father's Socio-Economic Status (SES)			
PSE Goal (in descending order of rank)	Lowest	2nd Lowest	Upper Middle	Top
Preparing for a job or career	1	1	1	1
Develop potential	2	2	2	2
Improve/Establish self financially	3	3	3	5
Have more life choices	4	4	4	3
Stepping stone to further education	6	5	6	4
Obtain a well-rounded education	5	6	5	6
Develop social/interpersonal skills	7	7	7	7

*Indicated as Very Important to accomplish.

4.6 Summary

Analyses of student expectations at the sub-group level suggest that while respondents may assign varying importance to selected expectations, the relative ranking of the highest and lowest expectations are common among most first-year post-secondary students. However, it should be noted that there are some differences in attitudes across the various target groups. For example:

- Students enrolled in college career/vocational programs place higher emphasis on career expectations than do students enrolled in a college/university-college academic program or students enrolled in a degree program at a B.C. university. It is interesting to note, however, that college career/vocational respondents shared similar aspirations with respect to personal and social expectations.

- Students enrolled in an academic (university transfer) program at a university-college or college attach the highest importance to educational expectations. More than 80% of such students indicate it is *important* or *very important* to "obtain a well-rounded education," and that their education should serve as a "stepping stone to further education."

- Post-secondary expectations appear to be correlated with the age of the student. Older students attach less importance to all expectations than do younger respondents. In particular, the importance of educational and social goals among older (23 years of age or older) students is significantly lower than the ratings assigned by younger students.

- In general, female students have higher post-secondary expectations than do male respondents. While both sexes attach similar importance to career-related expectations, females rate expectations in the personal, educational and social categories higher than male students.

- Survey results suggest that there is little difference in post-secondary expectations with respect to the students' socio-economic status. All students, irrespective of their fathers' socio-economic score (on a quartile basis), rate "preparing for a job or career" and "developing their potential" as their top two priorities. Similarly, all students attach less importance to such goals as "study until a job becomes available" or "meet family expectations".

Section 5
SELECTED ISSUES

While the findings regarding expectations are the key research focus of the CSP, there are a number of related issues that bear separate analysis. These include:

- Balance in Education
- Lifelong Learning
- Financing Education
- Confidence in Choices
- Information Requirements

5.1 Need for Balance Between Applied and Academic Instruction

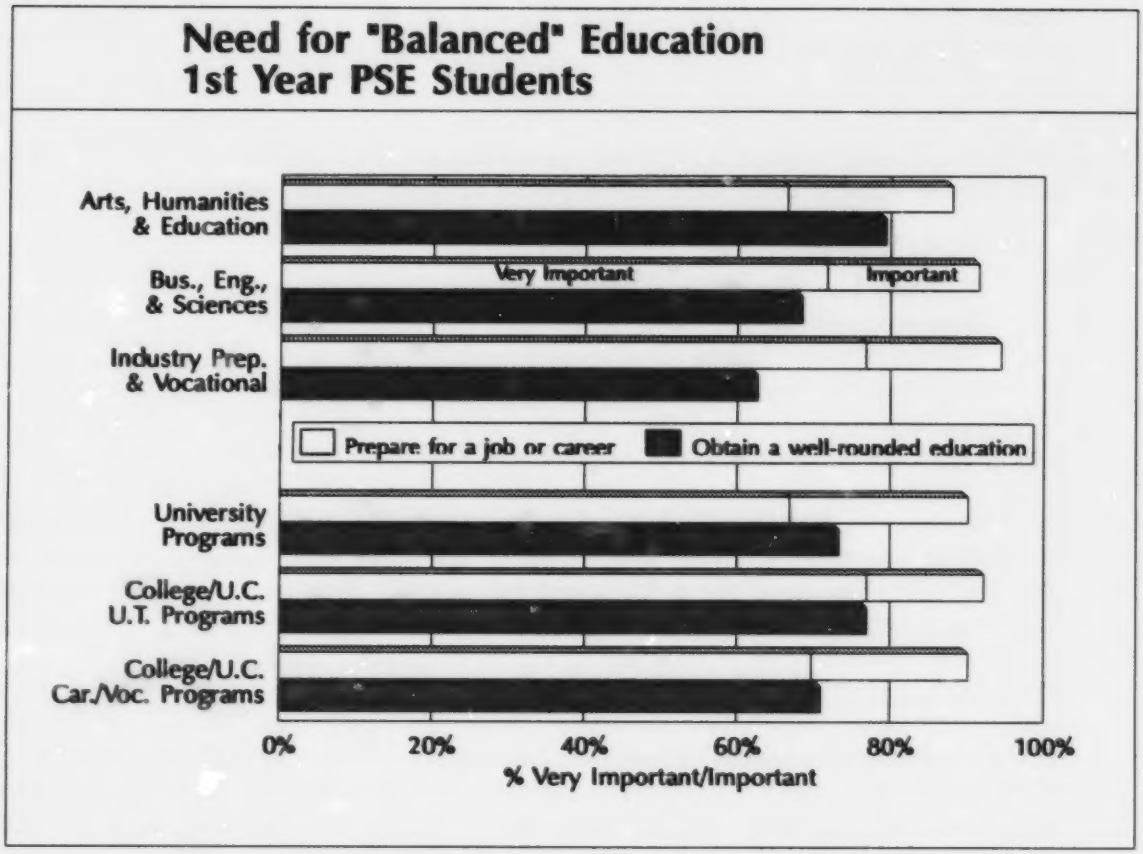
To determine whether clients think that the post-secondary system should concentrate solely on fulfilling career or academic requirements, questions were included to provide insight into the perceived need for a "balanced education". Analyses of the results yield the following observations:

Students Enrolled in Different Programs Attach Importance to a Range of Goals

While there are differences in terms of the relative emphasis placed on career, personal, educational and social expectations, students in various disciplines and programs stress the importance of obtaining a comprehensive education encompassing both applied and academic instruction. For instance, as highlighted in the following chart:

- Among first-year students in arts, humanities and education, approximately two-thirds (67%) think it is *important* or *very important* that PSE prepares students for a job or career.

- Among the 700 or so students enrolled in college career and/or vocational programs, more than two-thirds (67%) think it is *important* or *very important* to obtain a well-rounded education. This compares favourably with the proportion of university students (73%) who express a similar opinion.



A High Proportion of Students Enrolled in Trade Programs Want a Well-Rounded Education

Among the 723 apprentices surveyed, approximately 61% indicate that it is important (35%) or very important (26%) to obtain a well-rounded education. Similarly, three-quarters of apprentices report that their current training serves as a step towards further education.

Employers Seek Workers Who Possess a Broad Range of Skills/Attributes

Respondents were asked to comment on the extent to which the post-secondary system should focus on applied programs in relation to broader academic programs. Analysis of the data suggest that considerable diversity exists across target groups in terms of the appropriate emphasis of the post-secondary system. For example:

- While students indicate that it is important to be exposed to an appropriate mix of both applied and academic programs, employers place considerably more emphasis on applied rather than academic or professional programs. Whereas 86% of employers agree or strongly agree that the system should provide educational programs emphasizing job-related skills and knowledge, only 70% and 64% of employers believe similar support should be attributed to academic and professional programs respectively.

- Businesses attach more importance to communication skills than specific job skills, such as computer training or management skills. Roughly 97% of employers surveyed indicate that oral communication skills are important (18%) or very important (79%), whereas a smaller proportion reported that computer training (81%) and management skills (68%) are important.

- In contrast to the employer focus on applied programs, surveys of the general public suggest that many Canadians do not share similar opinions. In a recent Decima Survey, more than 60% of respondents indicated that the education and training system should expose students to the widest range of courses and programs possible to create well-rounded individuals. Only one-third (37%) of respondents felt that the education system should identify student strengths and channel students into the courses and programs that will develop these strengths and lead to a career.

- First-year post-secondary students, however, expressed different views regarding the role of post-secondary education. For example, among those students who stated that it is *important* or *very important* to gain a broad liberal education, more than three-quarters (86%) agreed or strongly agreed with the statement that their program of study should prepare them for a particular type of job. Survey data suggest that while students want both the personal and educational benefits of a liberal, academic education, they also want this education to lead to fulfilling careers.

Whether the purpose of post-secondary education is to obtain a marketable skill or to acquire a liberal education provoked a lively discussion in focus group discussions. For some students, a marketable skill was paramount. As one university transfer student at a community college claimed:

> *"I'm here for a job. The job is the bottom line."*

Most of the focus group participants asserted that it was not possible to separate the acquisition of a marketable skill from education of the whole person. While marketable skills were important, "knowledge for yourself is just as important".

> *"It's very intermixed. You really can't have one without the other. You can have knowledge for yourself without knowledge for a job. But you can't have knowledge for a job without knowledge for yourself."*

Most students tended to agree that "it's good to have both". This sentiment was not simply a desire to be educated, but rather to appeal to employers in a competitive market.

> *"Personally, I've always approached education...to become a well-rounded person and I really didn't care much about credit. But after being out in the world for several years I realized that credits are important and the piece of paper is important. So, certainly I want a well-rounded liberal arts education, but I also want the piece of paper that's going to get me the job."*

> *"Competition out there is tremendous. There's so many unemployed at this time that if you're not the best and can prove that you've got the [credential] and the knowledge...you're not going to get there."*

Being the "best" meant possession of both a broad knowledge base and specific skills.

5.2 Lifelong Learning

Respondents were asked various questions regarding their perceptions of lifelong learning. Results indicate:

- Approximately three-quarters of high school completers and apprentices see their current program as a step towards further education. In this context, it appears that many students expect to re-enrol in higher education/training programs later in life. As highlighted in Table 5-1, there is little difference in opinion over the importance each respondent group attributes to using their current program as a means to further education.

Table 5-1
Importance of Current Education/Training Program as a Stepping Stone To Further Education By Group

Group/View	Not Important	Moderately Important	Important	Very Important	Important + Very Important
HS Completers	6.6%	16.6%	36.2%	40.1%	76.3%
First-year PSE	8.4%	18.9%	31.7%	41.0%	72.7%
Apprentices	6.4%	18.6%	40.2%	34.9%	75.1%

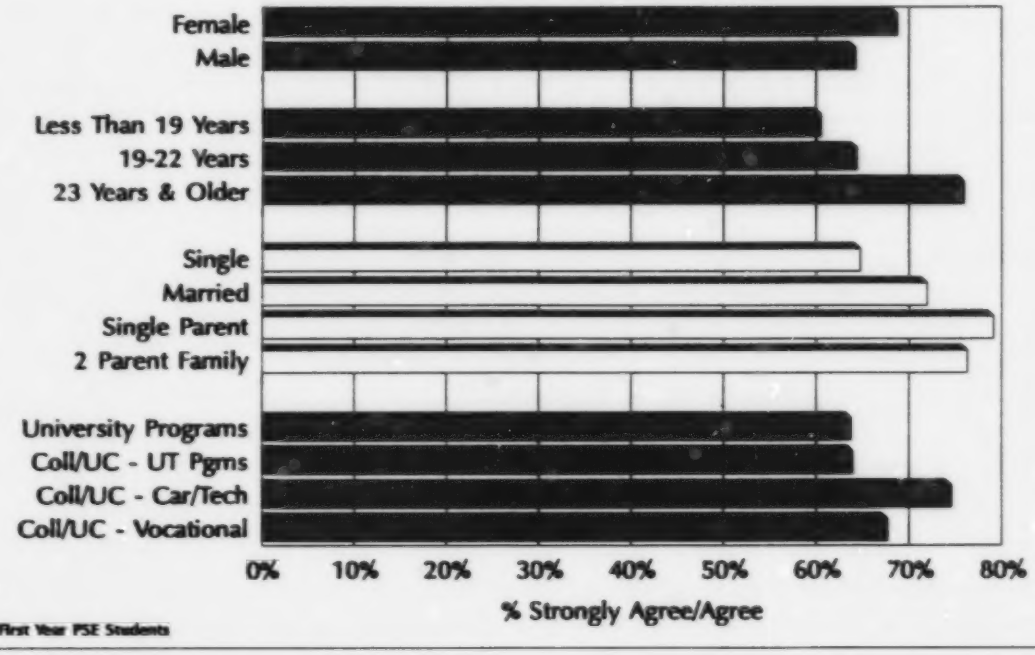
- Two-thirds of first-year PSE students expect to enrol in at least one credit program upon completion of their current program.

- Among first-year post-secondary students, there is considerable difference of opinion regarding future enrollment in a credit course upon completion of current program requirements. For instance, students 23 years and older tend to be much more positive about enrolling in a credit program than younger students. Similarly, almost 80% of single parents expect to enrol in a credit program, considerably higher than the 65% of single students who express a similar opinion.

- Students in career technical or vocational programs at a college or university-college express greater interest than university or university-transfer students in taking another credit course after completing their current program.

B.C. employers feel that it is very important that their employees have access to continuing education programs. Of the 881 employers surveyed, 88% declare this to be important (26%) or very important (62%).

Views About Future Enrollment in a Credit Course After Completion of Current Program*



* First Year PSE Students

Focus group participants were also asked whether they viewed post-secondary participation as a single event in their lives or as a recurrent activity over their life spans. The answer was almost unanimous: learning is a lifelong endeavour and will always be a part of their lives.

> *"I think learning has to be continual. It's good to go back. It will be an ongoing thing for me. You can never know too much."*

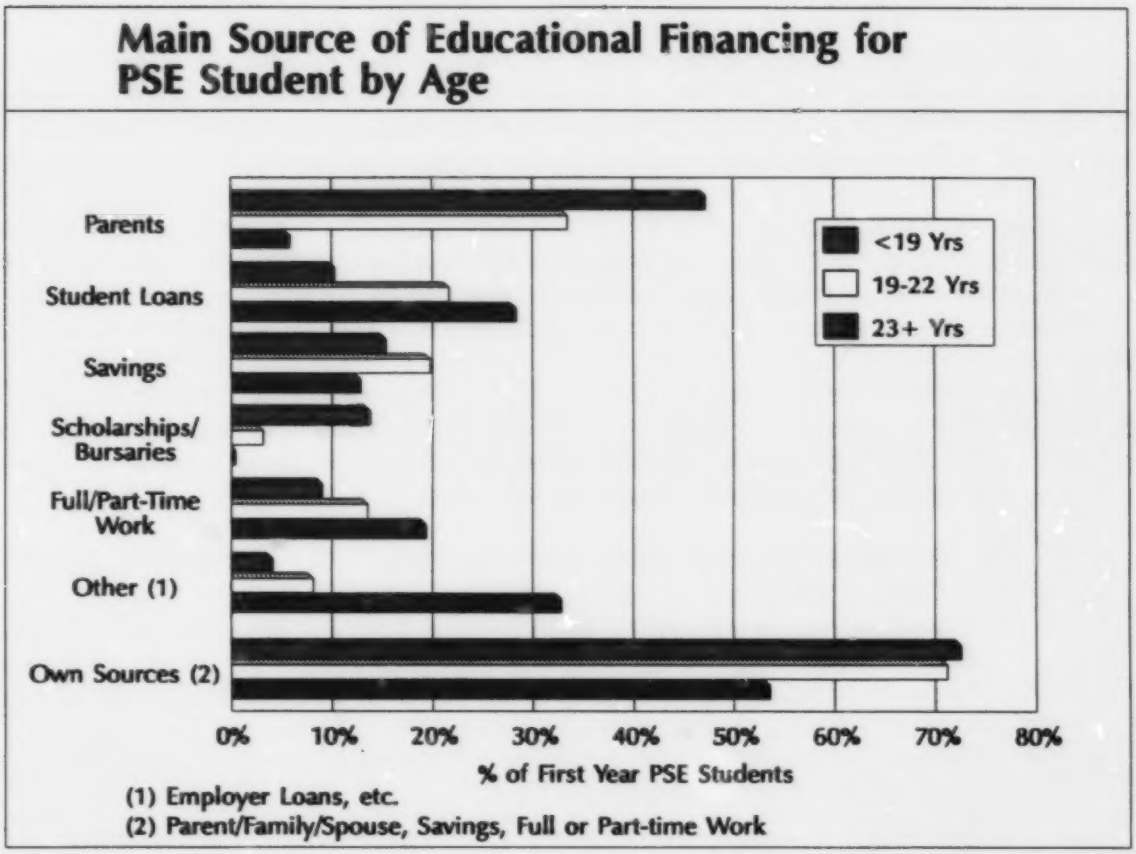
Whether their current educational programs would lead to office work, teaching, nursing, or child care, a recurrent education component was anticipated as a reality for the future.

> *"I think learning and education will be a part of my life forever. Whether it's taking one course or more."*

But "skills are one thing, education is another". Some indicated that their post-secondary experience to date had sensitized them to areas of knowledge and intellectual pursuit of which they had not previously been aware. Related to this was the complexity of the various specialties. As one student asserted, "education begets education".

5.3 Financing Education

Financing education and student financial assistance (SFA) emerged as major issues of importance in both the survey research and in focus group discussions. While students were critical of the system, their criticism was balanced against the notion that they did not want "something for nothing" from government.



As highlighted in the accompanying chart, students rely less on their parents and more on student loans and other sources as they grow older. This may reflect the fact that older students are more likely to live away from their parents and, therefore, have higher financial requirements. Younger students (less than 23 years) relied on their own sources to finance their education to a greater extent than did older (23+) students. A significant proportion of students who indicated that they rely primarily on their parents' assistance were either in high school (55.6%) or a PSE program (12.9%) in the previous 12 months. In contrast, only 13.8% of those students who were employed either full- or part-time in the previous 12 months indicated that they rely on their parents' assistance to help finance PSE.

First-year PSE students show significant differences in financing arrangements based on institution types. Parents of students in universities are far more likely to provide financial assistance than parents of students in university/college or college. Moreover, university students are more inclined to use personal savings to help finance their education. Conversely, students in university/colleges and colleges rely more on student loans, earned income and other sources. The fact that first-year university students are somewhat younger than university/college and college students helps explain differences in financing.

As expressed in the focus group discussions, student financial assistance clearly caused the most discontent. Concerns were specific and involved the following: perceived unfair and irrelevant assessment criteria; convoluted application procedures; lack of sensitivity to the needs of the post-secondary students of the 1990s; eligibility for loans based on parents' income and assets; and abuse of the student financial program by some students. Current eligibility for student loans does not reflect the student of today. Rather, criteria appear to be based on the stereotype of a young, residential student population. In particular, criteria regarding transportation needs of students, requirements of students with children and single parent families, and "inflexible and arbitrary" criteria based on parents' income and assets.

Focus group participants place problems with the student financial aid program in two areas — the current policies and practices of the provincial government, and abuse of the system by insincere students. Focus group participants offer the following suggestions to improve the current system of student financial assistance:

- Fair criteria to be established which would empower the individual to be responsible for her/his education.
- Individualized assessments conducted, based on facts relevant to the individual.
- Follow-up of student loan recipients regarding their seriousness. For example, further extension of student loans could be based on successful course completion. Student financial assistance should benefit those who want to learn.
- Sincerity on the part of both government and individuals regarding the development of an educated and skilled labour force.
- Student housing or subsidized housing to be made available for students.
- Fair criteria regarding transportation needs that accurately reflect the geography of the area.

5.4 Confidence in Decisions Regarding PSE Institution and Program

Both high school completers and first-year PSE students were asked several questions to ascertain their "confidence" in their choice of PSE program and institution. Survey results indicate that:

- Three-quarters (72.7%) of high school completers are *very confident* (32.3%) or *reasonably confident* (40.4%) that they selected the right institution. Almost one in five (18.8%) feel somewhat confident in terms of the institution selected. Only 3.6% of grade 12 completers indicate that they are not at all confident in their decision as to the PSE institution that they selected. As highlighted in Table 5-2, grade 12 students' confidence in program choices is consistent with opinion about institutional choices.

- Confidence in program/institution choices is slightly higher among first-year PSE students than among grade 12 completers. In Table 5-2, more than 80% of first-year students currently enrolled in a B.C. post-secondary institution indicate that they are *confident* or *very confident* in their program/institution decision. Approximately 5% of post-secondary respondents state that they are not at all confident about their program and/or institution selection. It should be noted that students enrolled in business, science and engineering courses tend to be more confident in their program choice than are students enrolled in an arts, humanities or education program.

Table 5-2
Confidence in Institution/Program Choice
HS Completers and 1st Year PSE Students

Confidence	HS[1] Completers	1st Year PSE			
		Univ.	Coll. Acad.	Coll. Car./Voc	Average
% Very/Reasonably Confident - Program	72.2%	76.6%	75.2%	87.6%	80.4%
% Very/Reasonably Confident - Institution	72.7%	82.4%	75.1%	86.4%	81.3%
% Somewhat Confident - Program	20.1%	16.8%	17.4%	10.2%	14.3%
% Somewhat Confident - Institution	18.8%	13.0%	17.9%	10.1%	13.6%
% Not at all Confident - Program	3.6%	6.5%	7.4%	2.0%	5.3%
% Not at all Confident - Institution	3.6%	4.6%	6.9%	3.5%	5.1%
% No Opinion - Program	4.1%	-	-	-	-
% No Opinion - Institution	4.8%	-	-	-	-

[1] HS completers who intend to go to a PSE institution next year.

As highlighted in Table 5-2, confidence in the various post-secondary program/institution choice differs considerably among first-year post-secondary students. For example:

- Students enrolled in a career technical or vocational program in a B.C. college or university-college tend to be more confident about their program decision than do those students enrolled in a B.C. university or an academic program in a college or university-college. As shown in Table 5-2, 86.4% of students enrolled in a college/university-college career technical or vocational program are either *very confident* or *reasonably confident* in their institution selection. In contrast, confidence among students enrolled in a college or university-college is lower (75.1%).

- Older students, and particularly those who spent the last year in the workforce, are more confident about their decision than students who have just graduated from secondary school.

Respondent confidence in their program decision is positively correlated with their confidence regarding long-term occupational or career goals. For example, among those students who indicate they have a definite career or occupational goal, 92.4% state that they are very or reasonably confident about their PSE program decision. In contrast, a much lower proportion (52.5%) of students who have no defined career or occupational goal indicate they are *confident* or *very confident* in their career decision.

In focus group discussions almost all individuals agreed they were attending the right institution for them, and a variety of reasons were provided to justify this assertion. For some, constraints due to geographic location and financial situations made a given institution the "right" institution. The availability of programs dictated which programs were undertaken. Others indicated that they were in their chosen program because it was what they wanted and there was "no reason to move...everything's here".

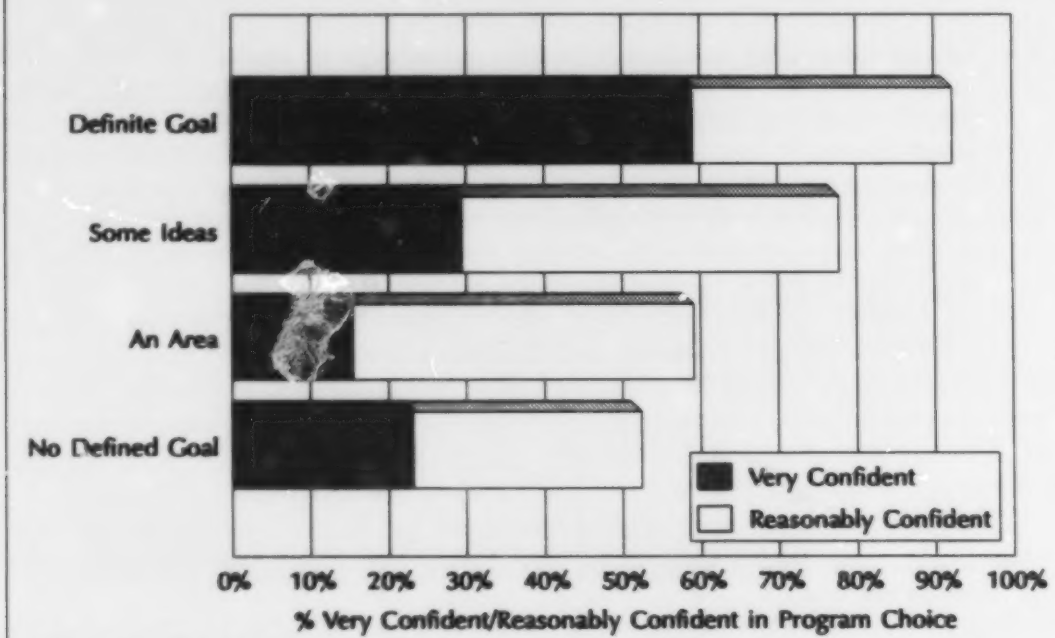
Standards of a particular institution or program were also important. If a program was not perceived as reputable, students indicated that they would not have enrolled. Many indicated that they were attracted to a certain program at a given institution based on its reputation.

> *"There's not much use putting two years in a program if the course doesn't have any integrity..."*

Program quality was also cited as a reason to choose university over community college attendance.

> *"Universities, because they have more money, can afford to hire better, more knowledgeable teachers than colleges."*

Confidence in PSE Program Choice by Career Goal Certainty*



* First Year PSE Students

Those in university transfer programs believed that they were in the right institution because it permitted them to save money for future educational endeavours. Particularly when they were unsure about which degree to pursue, or when the first-year of post-secondary was used as a form of career exploration, the choice of a community college was the "right" choice. University was perceived to be too expensive if one was unsure of what one wanted to do.

In contrast, those attending university were not necessarily any more clear about their future careers. Participants had not yet selected a major, but were in a general first-year program. However, community college attendance was not considered to be a viable alternative because, as one student noted, "university...it's always been the goal". All expressed the sentiment that "I really enjoy it...I'm really happy."

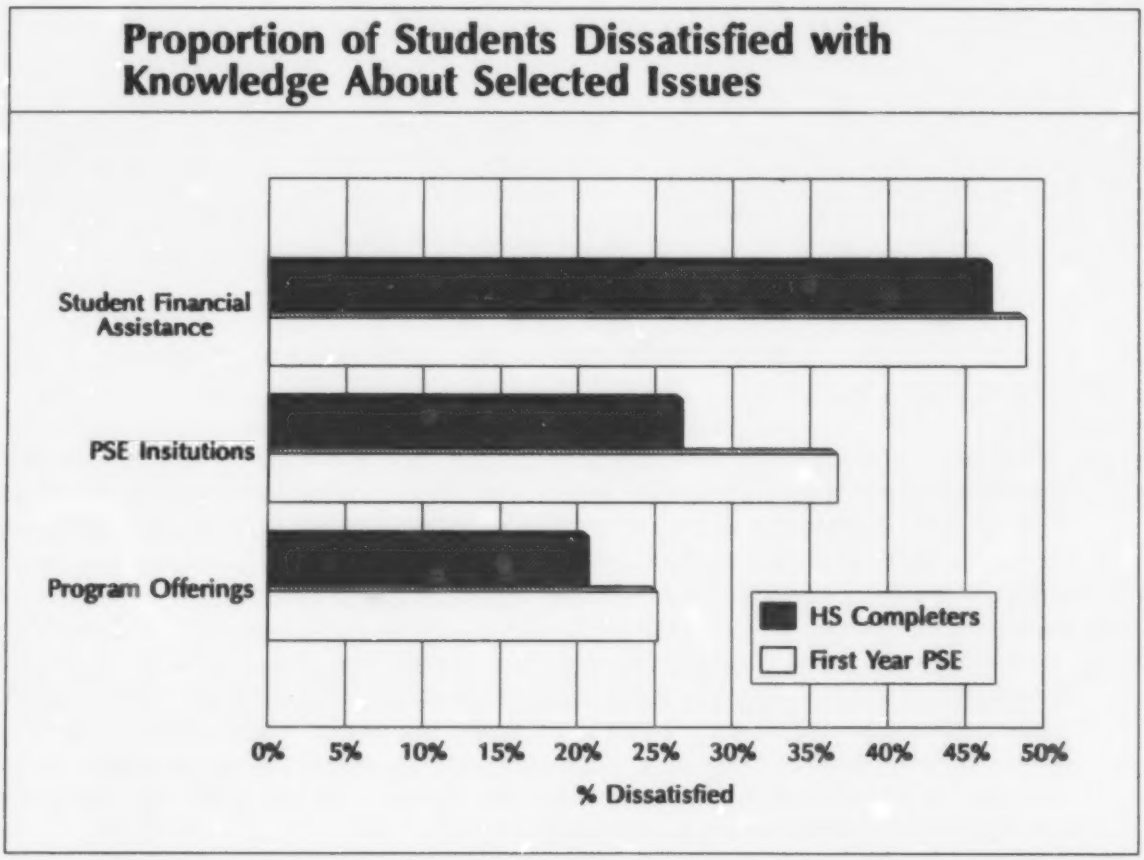
Some students indicated that post-secondary attendance would help them "find out what I want to do" and was "a good way to test the field to see what you're interested in".

None of the students who participated in these discussions indicated that they were in the wrong institution or the wrong program. Whether choices were made as a result of necessity, long term plans, or interest in a particular program, students appeared to be content with their given institution and program.

5.5 Information Requirements

Several questions were included in the various surveys to ascertain the level of knowledge students (high school completers, first-year PSE students, apprentices) have with respect to post-secondary education programs and institutions, and student financial assistance. Analyses of survey results suggest that:

- Students are <u>least</u> satisfied with their knowledge of student financial assistance. Almost one-half of high school completers (46.7%) and first-year PSE students (48.9%) state that they are not satisfied with the knowledge they have about student financial assistance. In comparison, a lower proportion of students indicate dissatisfaction with their understanding of the types of programs or types of post-secondary institutions in the province.



- It should be noted that while first-year PSE students are less satisfied with their knowledge about selected issues, this could be partially attributed to differences in the scales used (4-point scale for first-year PSE students, 5-point scale for high school completers) rather than a significant shift in opinion. Notwithstanding the differences in the scale, there appears to be a large proportion of first-year PSE students who do not have an adequate understanding of student financial assistance, types of post-secondary institutions or programs offered in such institutions.

- Knowledge of post-secondary institutions, programs and financial assistance is positively correlated with the student's plans for the future. Students with definite career or occupational plans also tend to have a better understanding of B.C.'s post-secondary education system. First-year PSE students who do not have well-defined career or occupational goals tend to be less informed about the post-secondary system in terms of types of institutions, programs or financial aid.

Knowledge About Student Financial Assistance

Respondent knowledge about student financial assistance tends to be correlated with the age of the student — older students tend to be more knowledgeable about student financial aid than were younger respondents. Given that college students tend to be older than university students, a higher proportion of students enrolled in university-transfer programs or career/vocational programs indicate they are more satisfied with their knowledge about student financial assistance than are students enrolled in a university degree program.

Among high school completers who state they intend to finance their education primarily through student loans, almost one-third (32.7%) indicate they have very little or no knowledge at all about student financial assistance. Similarly, more than one-quarter (27.3%) of first-year PSE students who state they are financing their education primarily through student loans indicate they are not satisfied with their knowledge about student financial assistance.

Respondents 18 years or younger reveal no significant difference in knowledge about SFA options on the basis of institution (university, college or university-college), program or sex.

Knowledge About Post-Secondary Institutions and Programs

All student respondents were asked to indicate the degree of satisfaction with their knowledge of: programs offered within B.C.'s post-secondary system; and the types of institutions comprising the system and relationships between them.

- In general, students (both high school completers and first-year PSE) have a better understanding of post-secondary institutions and programs than about student financial assistance. For example, whereas more than 45% of students indicate they are dissatisfied with their level of knowledge about SFA, the proportion of students who indicate they have insufficient knowledge about PSE institutions and PSE programs is markedly lower. As highlighted in Table 5-3, only one-quarter of high school completers indicate they are not satisfied with their program/institution knowledge. A slightly higher proportion (36.8%) of first-year PSE students state they are not very knowledgeable about the types of PSE institutions.

- As shown in Table 5-3, there is little difference in knowledge about the PSE system (programs, institutions) on the basis of the highest anticipated level of education.

Table 5-3
Proportion of Students Indicating Dissatisfaction with Their Knowledge of PSE Institutions/Programs

Group	Institutions	Programs
HS Completers	26.8%	20.8%
1st Year PSE	36.8%	25.2%
HS Completers:		
· expect to obtain prof. post-grad. degree	24.9%	18.7%
· expect to obtain bachelor degree	26.3%	24.4%
· expect to obtain diploma	25.2%	16.5%
1st Year PSE:		
· expect to obtain prof. post-grad. degree	37.6%	26.7%
· expect to obtain bachelor degree	38.3%	25.7%
· expect to obtain diploma	32.7%	21.6%

Relationship Between Knowledge About the PSE System and Confidence in PSE Decisions

Analysis of the survey information suggests that students who are more satisfied with their knowledge of PSE programs and institutions tend to be more confident in their post-secondary education decisions.

As highlighted in the following chart, a high proportion of students (high school completers and first-year PSE students) who indicated that they were *well* or *very well satisfied* with their knowledge also indicated that they were *very confident* in their program/institution decisions. Students who were less satisfied with their knowledge of the PSE system were less confident about their program/institution decision.

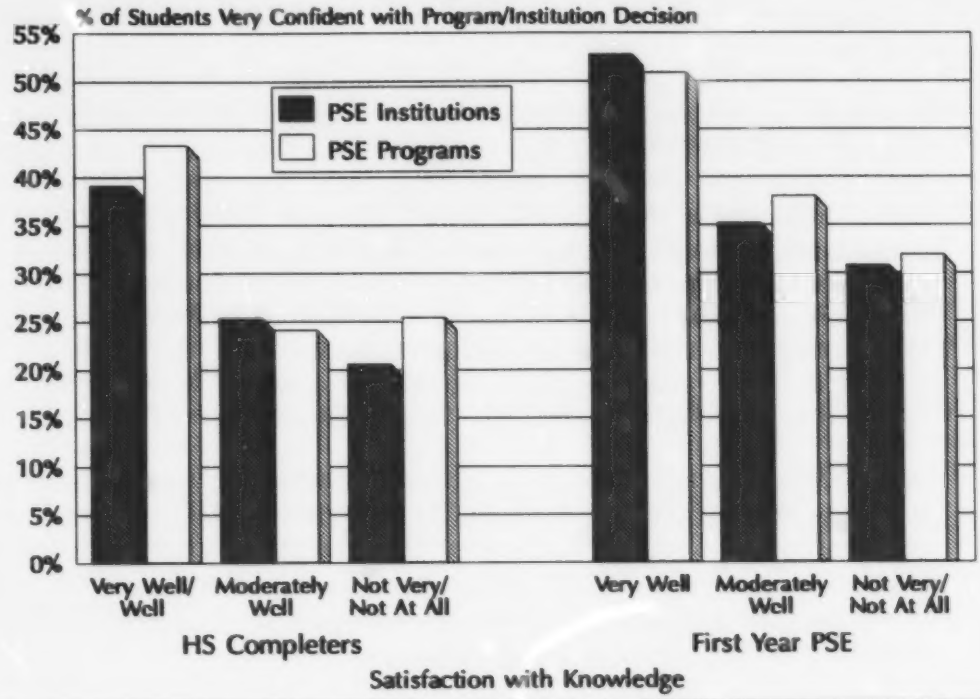
Focus group participants at all institutions admitted that they knew very little about the B.C. post-secondary system. When asked to rank their knowledgeability level on a scale of one to 10, almost all gave themselves a three or less out of 10. For some, there was no reason to look beyond the local institution and thus a satisficing (Simon, 1957) approach to obtaining information was adopted.

> *"I guess I didn't really look into it. I knew I would come to CNC...this is where I wanted to be...basically, I don't have any idea what other colleges are offering."*

Others found the system and what it offered overwhelming.

> *"It seems like the system changes a lot...It's hard to keep up to it."*

Relationship Between Satisfaction with Knowledge of Institution and Confidence in Program/Institution Decision



Ignorance of the system was attributed to a variety of reasons. High school counsellors did not know the basics and this resulted in a "major lack of communication". Others acknowledged that the information is available. However, a considerable amount of personal investigation is required. Students within the community colleges claimed that "individual departments don't tell you the complete story about transfer". Limited knowledge, however, was recognized to be expensive in the long run for both the individual and the system.

> *"[Lack of knowledge] adds years to the total time of education you have to spend, and if you're getting loans, well...If they put some of that money at the secondary level to increasing the counselling awareness for secondary students I think it would be money well spent."*

Most students relied on information about programs from word of mouth and experiences of other students rather than the official information channels.

5.6 Summary

The results of the *Client Survey Project* provide valuable information on several key issues including "balance" in education, lifelong learning, financing, and information issues associated with post-secondary education. Some of the highlights of the survey results are detailed below.

- It is clear that students' expectations cannot be compartmentalized in terms of their program and/or institution. For example, while students who are enrolled in a career/vocational program attach very high importance to career-related expectations, these students also have high aspirations with respect to other educational, personal or social goals. Similarly, students enrolled in arts and humanities programs also cited the importance of their education in preparing them for a job or career. 84.8% of students enrolled in a four year program in an arts/humanities discipline stated that it was important or very important that their education prepare them for a job or career, which was only slightly lower than the 88.1% of engineering or applied science students who were of the same opinion.

- While employers were more supportive of applied rather than academic programs, it is clear that employers value students who have a broad range of skills. For example, approximately 97% of employers contacted indicated that it was important (18%) or very important (79%) that students have good oral communication skills. In comparison, a smaller proportion of employers attached similar importance to computer training (81%) or management skills (68%).

- Students do not view their current education as a one-time activity. Three-quarters of all students — grade 12 completers, first-year PSE students, apprentices — view their current education as a "step towards further education". In this context, given the high aspirations of students (to obtain a degree or post-graduate degree), students enrolled in a career/vocational program were most positive about continuing their education upon completion of their current program. Almost three-quarters (72%) of students enrolled in a career/vocational program indicated that they would likely enrol in at least one credit course upon completion of their current program.

- In terms of financing their education, most students who are about to enter a PSE program (grade 12 completers) plan to finance their education from their "own sources" (parents, family, savings, full or part-time work). Among students currently enrolled, however, a much lower proportion actually cite "own sources" as their main source of PSE financing.

- A higher proportion (72%) of younger (less than 23 years) students stated that they would be financing their education primarily through their own means. In comparison, the proportion of older (23+) students who relied mainly on their own sources was markedly lower, as only 53.6% of older respondents respectively indicated that they would finance their education primarily through their own sources.

- Student financial assistance appears to be a major issue among first-year PSE students. For example, almost half (49%) of first-year students indicated that they were dissatisfied with their knowledge about student financial assistance. Dissatisfaction with the student financial assistance program itself was also a recurrent theme among the five focus group meetings held throughout the province.

- In general, students enrolled in B.C. post-secondary institutions are confident in their decisions. More than 80% of first-year students stated that they were very or reasonably confident in their program or institution choice. Students enrolled in career/vocational programs tended to be more confident in their decisions than were students enrolled in a university degree program or a college/university-college academic program.

- It appears that students who indicated a higher level of satisfaction with their knowledge of post-secondary programs and institutions were also more confident with their PSE decisions. For example, among those students who stated that their knowledge of PSE programs was very good, more than half (53%) stated that they were *very confident* in their program decision. In contrast, among those students who stated that they were not satisfied with their knowledge of PSE programs, less than one-third (31%) were *very confident* in their program choice.

Section 6

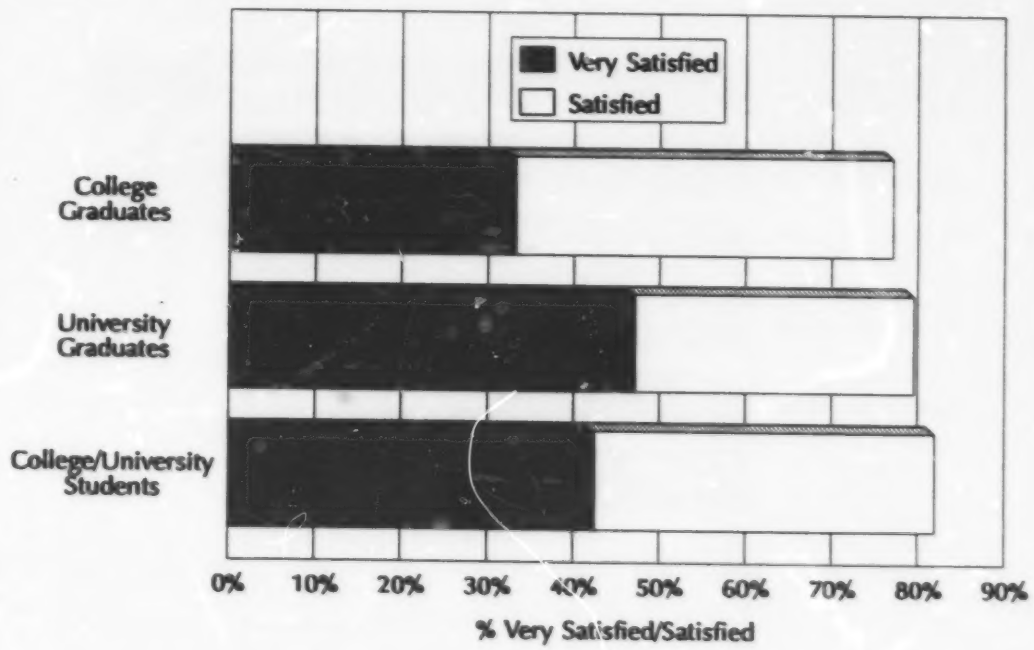
EMPLOYER SATISFACTION

B.C. employers are key indirect clients of the provincial education and training system. In the past 12 months prior to the survey, approximately two-thirds of B.C. businesses surveyed had hired either a high school or PSE student on a full- or part-time basis. Employers in the accommodation and food industries were the most active, with 80% of these businesses hiring a student in the past year. Conversely, only one-half of those employers in the primary industries (mining, logging, etc...) had recently hired a student.

6.1 Employers are Satisfied with Students/Graduates

Among B.C. employers surveyed, most are quite satisfied with the quality of students/graduates hired. Employers are particularly satisfied with college/university and university students, as shown by the higher percentage of *very satisfied* responses.

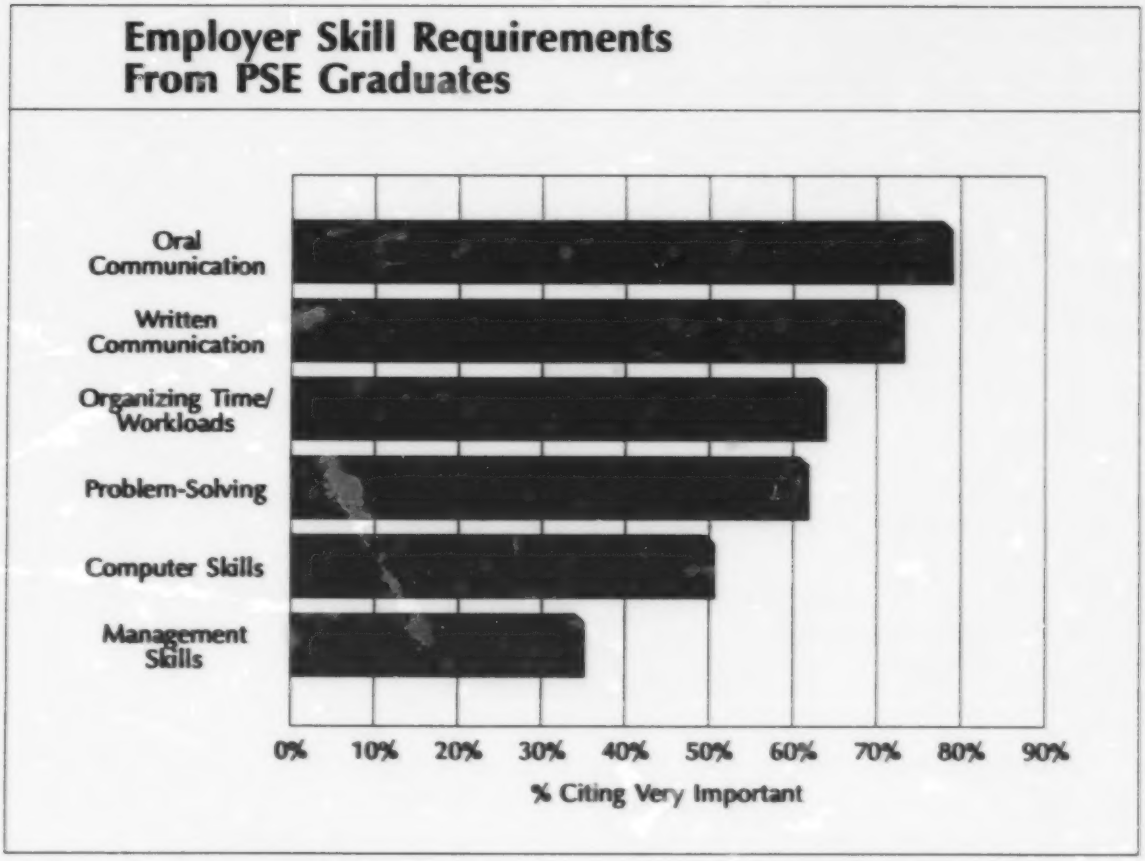
Employer Satisfaction with the Quality of Students/Graduates Hired



6.2 Employers' Changing Needs

The majority (70%) of B.C. employers indicate that entry level requirements have increased over the past decade. Of the 881 employers contacted, roughly one in four state that more than one-half of their current positions require persons with a post-secondary degree, college diploma or professional certificate. Among large employers (500+ employees), 45.5% state that more than one-half of their current positions require persons with some post-secondary education. Based on this analysis, the need for individuals with some post-secondary education is greater among large companies.

Employers were asked to assess the importance of a number of skills and qualifications. They cite communication (oral and written) and organizational skills as being more important than problem-solving and certain technical skills. These skills provide workers with the basis to learn, upgrade and adapt to changing conditions. In addition, most employers (70%) believe high school students should be required to have some on-the-job work experience as a condition of graduation. Similarly, employers attach considerable importance to co-operative education and continuing education programs.



Respondents of the Employer Survey were asked to provide additional comments relating to B.C.'s education and training system. Many of the comments are consistent with the general need to achieve a greater balance in B.C.'s post-secondary education and training system.

> *"...high schools, colleges and universities need workplace training and co-operative programs."*

> *"[Respondent] believes in the combination of academic and practical skills in education. I would like to see more people with practical skills. Higher education is emphasized too much, and this is evident in the number of jobs employing people who are way over-qualified for the positions they hold. Students need more fundamental skills."*

> *"...today's students need better direction and guidance about future employment opportunities."*

> *"...students' expectations are too high and they want to get the 'top dollar' without working very hard...Not enough money is being granted to post-secondary education. The Orient has many students coming here and they will be the movers and the shakers. We will be out-gunned in technology and science. There is not enough emphasis on the basics and the Year 2000 program moves away from the basics."*

DISCUSSION ITEMS

The results of the *CSP* have wide-ranging implications for the post-secondary education and training system. While the purpose of the research was to provide additional information about student expectations of the system, it is essential that decision-makers evaluate the extent to which B.C. universities, colleges and institutes meet the demands and expectations of a range of clients, including students, apprentices, employers and the public. Highlighted below are some policy issues arising from the information obtained through the various client surveys.

- **Need for a "Balance" in Post-Secondary Education and Training**

It is clear that students enter the post-secondary system expecting to achieve a range of career, personal, educational and social objectives. The diversity of expectations of students entering the post-secondary system poses several questions for policy-makers. For example:

- What is the appropriate "mix" of career and academic instruction that is required given the breadth of expectations students hold?
- How should the system both prepare students for the workforce, and provide them with the necessary foundation to enable them to continue their education at a later date?

- **Student Aspirations and Expectations**

Given that almost three-quarters of high school completers expect to enter a post-secondary institute directly in the fall, but only 40% actually enrol, what factors account for the significant reduction in the number of students that actually enrol in a post-secondary institution? Is this a shortcoming of the system (perhaps the system has not adequately communicated the requirements associated with post-secondary education), or is it a reflection of changes in students' circumstances or aspirations?

Students have high aspirations prior to enrolling in a post-secondary institution. However, student aspirations decline somewhat upon entry into the PSE system. What factors account for this decline in aspirations? Should this be a concern to the system?

- **Addressing Student Goals**

Students place considerable importance on preparing for a job or career. However, it cannot be inferred that students require their curriculum or program mix to be highly vocational or career-oriented. In some instances, students may feel that they can best achieve their career/job goals through academic programs rather than through applied or vocational programs. For example, the proportion of students enrolled in arts and humanities programs who rated career expectations as *important* or *very important* (77.6%) is not substantially lower than the proportion of business/commerce students (88.8%) who attached similar importance to the various career expectations.

- **Making Apprenticeship More Attractive**

The fact that apprentices wait eight years on average before entering programs suggests that apprenticeships are either too unattractive or too unavailable to high school students. Equally important, a recent Economic Council of Canada report suggests the apprenticeship system is primarily training students in occupational areas of low relative employment (e.g., manufacturing, construction), and providing virtually no training in areas of high and growing employment demand (e.g., service sector).

- **Equity Issues**

With the exception of academic achievement, the profile of students being accepted at B.C. post-secondary institutions is generally representative of the profile of students applying to such institutions. However, analyses of the data suggest that post-secondary applicants are disproportionately represented among families with higher levels of education and higher status occupations, with much lower representation of applicants from families with lower socio-economic status. Further analysis is needed to establish the extent to which these differences reflect either variations in attitudes and aspirations developed prior to an individual facing the decision to attend post-secondary education, or "barriers" (financial or otherwise) which exclude various groups from participation in the post-secondary system.

- **Addressing Information Needs**

A significant proportion of students, both about to enter and currently enrolled in the system, indicate that they are dissatisfied with the information they had pertaining to programs, institutions and student financial assistance. Does this dissatisfaction reflect a failure of the post-secondary system, or is it indicative of the need to improve student counselling prior to entry into the post-secondary system? Is the solution to simply provide more information, or is it to provide the information in a more timely and focused manner?

The generally high level of confidence most students have in their institutional and program choices is reassuring in that confidence levels rise in relation to knowledge of the system. This finding supports the contention that institutions must actively promote and market themselves both to prospective students and the public at large.

- **Addressing Employer Concerns**

Employers place considerable emphasis on "general" skills such as written and oral communication, organizing time and workloads, and general problem-solving skills. However, given that employers are most supportive of applied rather than academic programs, can post-secondary institutions adequately address the business community's demand for both general skills and applied programs? Also, while the majority of employers indicate that entry-level skill requirements have increased significantly in the last five to 10 years, only a small proportion (20%) currently provide formal training courses for first-year employees. Should employers be encouraged to take a more active approach in employee training, either through co-operative education programs or other intra/extramural training programs?

Appendices

The *CSP* encompassed the administration of four surveys plus a series of focus group sessions conducted in five regions of the province. Outlined below is background information on each of the four surveys.

- **High School Completers Survey**

On an annual basis, the Ministry of Education surveys a representative sample of 5,000 students who have just completed grade 12. The sample was selected in July 1991 by the Information Management Branch, B.C. Ministry of Education and Ministry Responsible for Multiculturalism and Human Rights. The initial mail-out occurred during the period July 18-19, 1991. The surveys were coded to facilitate the "linkage" of the survey data provided by the student with administrative data (student GPA, school district etc.) held by the Ministry of Education. To enhance survey response, all students were mailed a reminder card prompting them to complete their questionnaire and return the survey in the pre-paid envelope. A total of 1,777 usable surveys were returned by the data-processing cut-off date of August 23, 1991. After excluding the surveys deemed unusable, the valid response rate for the High School Completers Survey was 36.0%.

Questions in the High School Completers Survey were developed together by the Ministry of Education and Ministry of Advanced Education, Training and Technology. The actual administration of the survey was undertaken by Points of View Research and Consulting under the direction of the Information Management Branch, B.C. Ministry of Education.

For further information about the High School Completers Survey, readers may contact:

Information Management Branch
B.C. Ministry of Education and
Ministry Responsible for Multiculturalism and Human Rights
3rd Floor, 617 Government Street
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- **Post-Secondary Student Survey**

The Post-Secondary Student Survey was initiated by the Ministry of Advanced Education, Training and Technology to provide the PSE system with a better understanding of the expectations of students upon entering the post-secondary education system. The sample frame was limited to only those students who were enrolled in the first-year of their programs.

The sample selection was undertaken by the Policy, Planning and Program Evaluation Division, Ministry of Advanced Education, Training and Technology. With the assistance of nearly all post-secondary institutions in B.C., a representative sample of 3,150 first-year students (enrolled as of October 1, 1991) was selected. The initial mail-out occurred during the period from October 18 to November 14, 1991. Similar to the High School Completers Survey, all respondents were mailed a reminder card approximately 10 days after the initial mail-out. Surveys were coded to enable researchers to "link" institutional/program data with student survey responses, as well as to facilitate the mail-out of a second questionnaire and telephone follow-up surveys to non-respondents.

A total of 1,367 surveys were completed (including 28 surveys from one institution that was oversampled at their request) and returned to the consultants by the survey processing cut-off date of January 10, 1992. In addition, the consultants conducted telephone interviews with non-respondents and obtained 384 surveys during the period from January 13-23, 1992, resulting in a total usable sample of 1,751 questionnaires and a valid response rate of 57.5%.

Questions included in the Post-Secondary Student Survey were developed by the Ministry of Advanced Education, Training and Technology, with some additional questions included at the request of the Ministry of Education. The actual administration of the survey was undertaken by Marcon Research Services of Victoria, under the direction of the Policy, Planning and Program Evaluation Branch, B.C. Ministry of Advanced Education, Training and Technology.

For further information about the Post-Secondary Student Survey, readers may contact:

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- **Focus Group Surveys**

To complement the information obtained from the Post-Secondary Student Survey, the Ministry of Advanced Education, Training and Technology commissioned five focus group meetings with 34 students from five post-secondary institutions: University of British Columbia, University College of the Cariboo, Selkirk College, College of New Caledonia, and the Fort St. John satellite of Northern Lights College. The purpose of these focus group meetings was to afford students the opportunity to provide non-structured responses to questions about expectations and experiences in the post-secondary system, as well as to validate the relevancy of the questions that would be included in the Post-Secondary Student Survey.

The process of inviting students to participate in the Post-Secondary Student Survey was undertaken by the Ministry of Advanced Education, Training and Technology. Participants were randomly selected from the first-year student populations from the five aforementioned institutions. These institutions were deemed to be representative of the institutions that comprise the province's post-secondary education system. The focus group meetings were conducted by Lesley Bellamy during the last two weeks of October 1991, each lasting approximately two hours. The issues discussed in these focus group meetings were consistent with the topics that were to be addressed in the Post-Secondary Student Survey.

For further information about the results of the focus group research, readers may contact:

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- **The Apprentice Survey**

The Apprentice Survey was initiated by the Skills Development Division, Ministry of Advanced Education, Training and Technology to gain a better understanding of the expectations of apprentices upon entering the post-secondary education and training system. In particular, the Apprentice Survey was developed to provide the ministry with information respecting apprentices' expectations of their training programs, the reasons for entering an apprenticeship program, and the extent to which their previous education prepared them for their apprenticeship.

The sample selection was undertaken by the Skills Development Division, Ministry of Advanced Education, Training and Technology, and consisted of those apprentices who were in the first quarter of their apprenticeship. Prior to its administration, the survey was pretested by a group of apprentices enrolled in an apprenticeship program at Camosun College. The initial mail-out occurred during the period from September 9 to 13, 1991. Similar to the High School Completers Survey, all respondents were mailed a reminder card approximately 10 days after the initial mail-out. Survey's were coded to enable researchers to monitor survey response and to facilitate the mail-out of a second questionnaire and/or telephone follow-up survey to those respondents who did not return the mail-out questionnaire by November 8, 1991.

Of the 1,600 questionnaires distributed, 723 surveys were completed and returned to the consultants by the survey processing cut-off date of November 8, 1991. In addition, the consultants conducted telephone interviews with 50 non-respondents to establish the extent to which survey information would be affected by non-response bias. In general, the attitudes of non-respondents did not differ significantly from the opinions provided by those apprentices who completed the mail-out questionnaire. After adjusting for surveys that were returned as undeliverable, the valid response rate for the Apprentice Survey was 48.5%. The actual administration of the survey was undertaken by Rivers and Associates of Victoria, B.C. under the direction of the Skills Development Division, B.C. Ministry of Advanced Education, Training and Technology.

For further information about the Apprentice Survey, readers may contact:

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- **The Employer Survey**

The Employer Survey was initiated by the Ministry of Education in the summer of 1990 to provide the ministry with employer opinions about B.C.'s secondary school system. The 1991 survey was expanded to include information concerning business opinion about B.C.'s post-secondary education system.

In order to ensure a satisfactory response rate, the ministry commissioned a telephone survey (instead of a mail-out) of a representative cross-section of private sector employers. Public sector employers were excluded, as this information could be captured through existing government evaluation and/or communication procedures.

A sample of 2,000 businesses was randomly selected by Dominion Directory which included all firms listed as a business in the Yellow Pages. Excluding duplicate listings, the sample was drawn from a total population of 142,000 businesses. To obtain additional information from the larger firms, who are more likely to hire a post-secondary student or graduate, business sectors characterized as "large" employers were oversampled (i.e. banking establishments, utilities, mining and lumber companies etc.).

The survey was field-tested in July 1991 and administered in late July and early August, 1991. Of the 2,000 businesses identified, a total of 881 valid surveys were obtained. After adjusting for those firms that were no longer in business, the valid response rate for the Employer Survey was 49.1%.

Questions included in the Employer Survey were developed by the Ministry of Education with some additional questions included at the request of the Ministry of Advanced Education, Training and Technology. The actual administration of the survey was undertaken by R.A. Malatest and Associates Ltd. of Victoria, B.C. under the direction of the Information Management Branch, Ministry of Education.

For further information about the Employer Survey, readers may contact:

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1990 LINK File Highlights

Appendix B

The LINK File is an amalgamation of student information provided by the Ministry of Education and British Columbia's public universities, colleges and institutes. The file was created in 1987 to help foster planning in the education system and research on the flow of students into and within the post-secondary education system. The file is maintained by B.C. Research. Outlined below are some of the highlights contained in the March, 1991 publication.

- Proportionally, more students are going directly from high school into post-secondary institutions than ever before. In the fall of 1989, more than 100,000 students enrolled in the post-secondary system across the province. Among grade 12 graduates, approximately 40% (10,484 in 1989) now enter advanced education immediately following high school. Of this group, 40% go to university, 46% enter college academic programs, and 14% enrol in career/technical programs. Since 1987, college/institute enrollments have increased 14% and university enrollments 14%. (Note that out-of-province enrollments are not counted in these figures.)

- The relatively small percentage of high school completers who enter PSE directly out of high school (10.5%) illuminates the growing pressure on PSE brought on by delayed enrollments and continuing students. Of the overall increase of 14,460 enrollments between 1987 to 1989, direct entries from high school account for only 6.6%, whereas institutional transfers account for 9.8%, and continuing and delayed entries 83.5%. More students now enter college after spending some years outside the education system than enter directly from high school. Among 1986 grade 12 graduates, 31% enrolled in college academic or university programs immediately after high school; a further 20% had entered the system by 1989. (Note that the volume of delayed entries into career/technical programs is unknown.)

- Movement within the post-secondary system is changing. The net volume of student transfers is increasing steadily, with the most frequent transfers from colleges to universities and other colleges. However, "reverse" transfers from universities to colleges and institutes are quickly rising; since 1987 reverse transfers rose by 37%.

- Degree completion rates are rising. About one-third of all students who begin college academic programs and university complete a first degree. About one-half of all students who enter university without having first attended a college complete a first degree. Also, "persistent rates" are up about 10% as university students are less likely to drop out. Students are enrolling in multiple programs as they become more selective in the courses they choose and the type of instruction they seek; since 1987, the number of students enrolled in multiple programs increased by 32%.

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Notes

SES Index (p.9) — Socio-economic status is based on an index developed by Blishen, Carroll and Moore which rates some 500 occupations in the *Canadian Classification and Dictionary of Occupations* according to their socio-economic status.

1 Economic Council of Canada, Good Jobs Bad Jobs: A Statement by the Economic Council of Canada. (Ottawa: Minister of Supply and Services 1990) p. 18.

2 Dr. Stuart Smith, Report of the Commission of Inquiry on Canadian University Education. (Ottawa: Association of Universities and Colleges of Canada, 1991), p. 72.

3 Decima Research Ltd., Decima Quarterly Report, Fall 1991, In-Depth Analysis: Education and Training, pp. 143, 144.

4 Province of British Columbia, Ministry of Education and Ministry of Advanced Education, Training and Technology, LINK: 1990 Highlights - An information partnership in British Columbia's Education System. (Victoria: Ministry of Education and Ministry of Advanced Education, Training and Technology, 1991), p. 4.

5 LINK: 1990 Highlights - An Information Partnership in British Columbia's Education System, p. 12.

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7 Province of British Columbia, Ministry of Advanced Education, Training and Technology, B.C. Human Resource Development Project: Working Forum Handbook. (Victoria: BCHRD, 1992), p. 12.

8 LINK: 1990 Highlights - An Information Partnership in British Columbia's Education System, p. 12.

9 LINK: 1990 Highlights - An Information Partnership in British Columbia's Education System, p. 16.